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January 1955

# HARVARD MEDICAL *ALUMNI BULLETIN*



*Second  
trimester . . .  
the midnight oil*

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# NEW APPOINTMENTS

Thomas H. Lanman, '16, Director of Alumni Relations, and Peter E. Pratt, Executive Secretary, have announced the appointment of Barrett Wendell, Jr., as a member of the office staff of the Harvard Medical Alumni Association.

The ever-increasing growth of Alumni activities both in the College and in the Medical School necessitates a continued expansion of the Alumni services. These additional responsibilities, particularly in connection with the activities of the Associated Harvard Clubs, have made it necessary for Mr. Pratt to spend the major portion of his time in Cambridge. Mr. Wendell will, in his new position, promote the liaison between the Alumni of the Medical School and those of the College. This liaison will strengthen even further the ties between the Medical School and its 5500 Alumni throughout the country.

Mr. Wendell, a resident of Beverly Farms, Massachusetts, prepared at Milton Academy for Harvard, from which he graduated in 1936. His Naval experience during World War II included service as Commanding Officer of an LCI in the Pacific. Active in community affairs, he is a Vestryman in St. John's Church,



*Mr. Barrett Wendell, Jr.*

Beverly Farms, Commander of Post 46, American Legion, and is Council Chairman of Organization and Extension in the North Shore Council, Boy Scouts of America. He is married and has one daughter.

\* \* \* \*

We welcome Mr. Wendell to the Alumni Office staff as an enthusiastic worker for the interests of Harvard.

Carl Binger, '14, has been appointed lecturer in psychiatry in Harvard Medical School and consulting visiting psychiatrist at the Massachusetts

General Hospital. Dr. Binger was formerly associated with the Rockefeller Institute for Medical Research and was on the faculty of Cornell University Medical College. He is editor-in-chief of *Psychosomatic Medicine* and is a Fellow of the New York Academy of Medicine and of the American Psychiatric Association.

\* \* \* \*

John Snyder, '35, formerly professor and head of the Department of Microbiology at the Harvard School of Public Health, has been appointed Dean of that institution to succeed the late Brigadier General James S. Simmons. Dr. Snyder, who at one time worked with the late Dr. Hans Zinsser, has been active in the study of typhus fever and other rickettsial diseases. He is at present consultant to the U. S. Public Health Service, the Veterans Administration, the Armed Forces Epidemiological Board, and the Massachusetts Civil Defense Committee. Dr. Snyder is a member of the Association of American Physicians, the American Epidemiological Society, the American Society of Tropical Medicine and Hygiene, and the American Public Health Association.

## *The Bulletin Invites*

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for publication. All communications should be addressed to

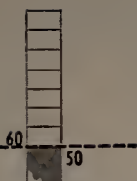
Harvard Medical Alumni Bulletin

25 Shattuck Street

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*—in the severe shock*



*secondary to myocardial infarction*



Acute  
myocardial infarction  
L. coronary a. occlusion



..... *may  
be  
life-saving*

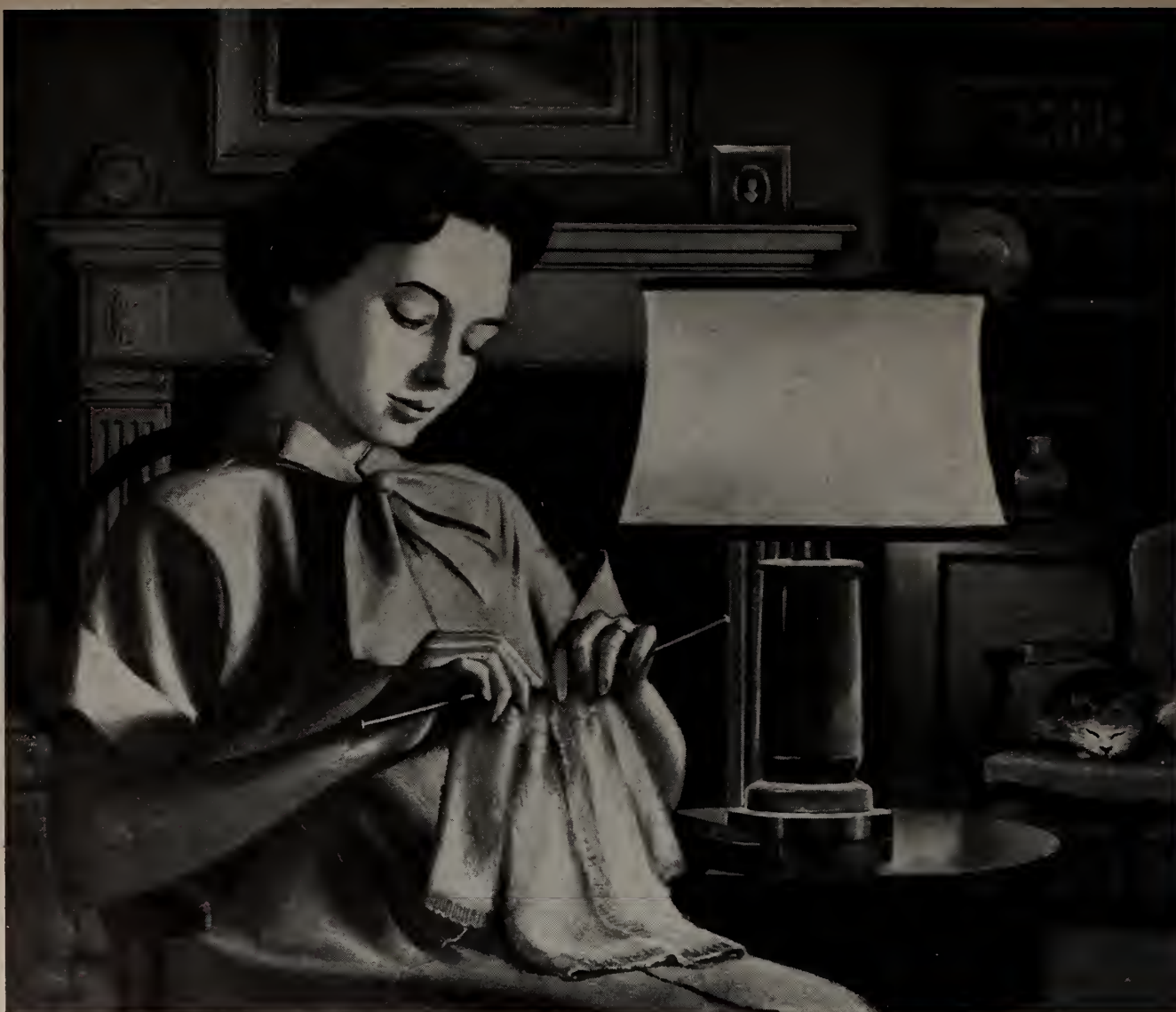
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1. Gazes, P. C., Goldberg, L. I., and Darby, T. D.: *Circulation*, 8: 883, Dec., 1953.  
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# HARVARD MEDICAL ALUMNI BULLETIN

VOL. 29

JANUARY 1955

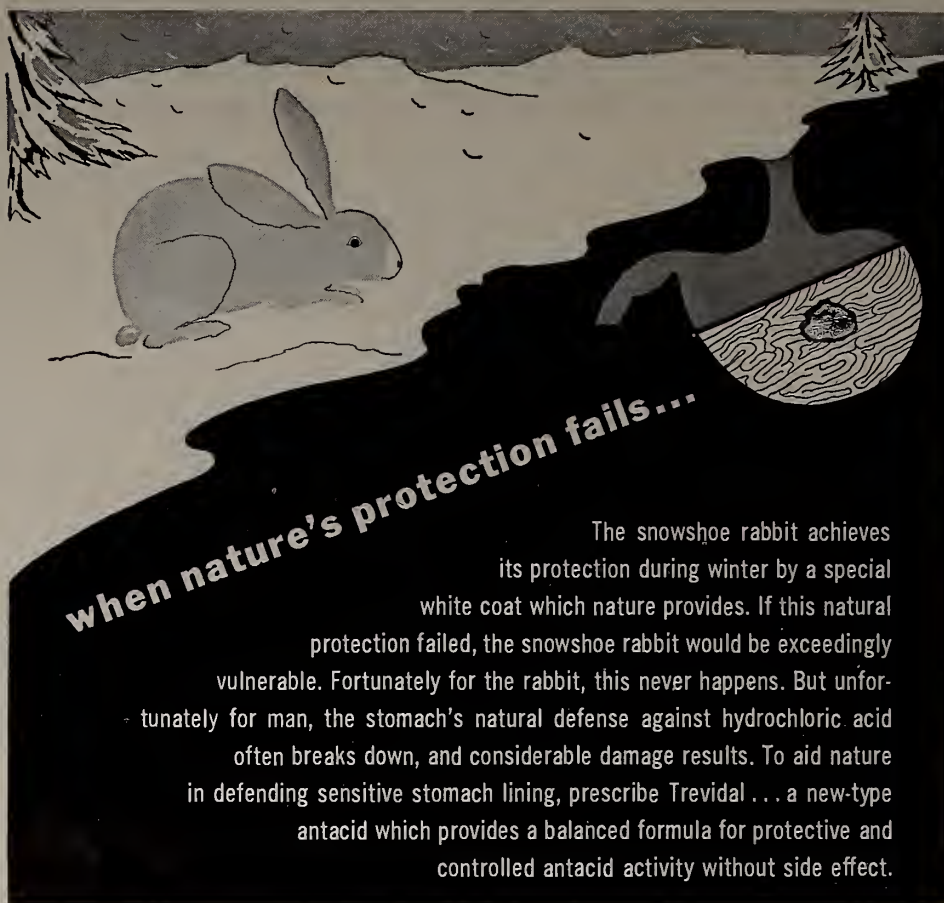
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**when nature's protection fails...**

The snowshoe rabbit achieves its protection during winter by a special white coat which nature provides. If this natural protection failed, the snowshoe rabbit would be exceedingly vulnerable. Fortunately for the rabbit, this never happens. But unfortunately for man, the stomach's natural defense against hydrochloric acid often breaks down, and considerable damage results. To aid nature in defending sensitive stomach lining, prescribe Trevidal... a new-type antacid which provides a balanced formula for protective and controlled antacid activity without side effect.

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# WE BUILT A modern house

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*Cutting B. Favour, M.D.*

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*Front yard looking toward living room from among the trees*

A revolution is taking place today in the design of the family living quarters. This is not in the advent of plumbing, central heating, and electricity with which we are all familiar but a revolution in the application of new knowledge to the comfort, convenience, and quality of family living. The revolt is against the traditional house which has changed little in interior design during the last century. It has been fostered by an era of imaginative architectural thinking and a supply of industrial products at reasonable prices more wonderful than ever was the case in fabled times. King Solomon with all the cedars of Lebanon did not have the treasure-house upon which to draw which Mr. House-builder has today.

We recently recapitulated this revolution by first living in a traditional house and then designing and building a modern house. The story which follows dwells on the major decisions as to style and materials we went through in being won over to contemporary house design. If you are planning a house or if you have ever built a house you will sympa-

thize with us. You may even agree with our thinking.

When we began our project three years ago we held two strong convictions. First, we were dyed-in-the-wool New England saltbox addicts. Second, we believed the golden age of house-building materials had passed. It seemed certain that our grandfathers had decimated the forests, leaving us nothing but plywood substitutes which we viewed with suspicion. Each of these beliefs has since been modified. Although we by no means subscribe to all that is called modern architecture, our major thinking is contemporary. And, happily, we have found that forest products are more varied and of more practical quality than they have ever before been.

Much of early interest in traditional houses grew out of familiarity with them and ignorance about any other methods of building. This feeling was strengthened by certain excesses in modern houses with which we were acquainted. We had heard of condensation on big windows which left puddles of water on the floor. A neighbor had a shed roof house with

an over-large heating bill in winter. We had been to cellarless houses with unheated concrete slab floors which were hard and cold underfoot. And we had been entertained in modern houses with partial partitions between kitchen and dining areas which did not prevent the whole house from smelling of cooking odors. Like most prospective house builders, we shared the conceit that we knew just what we wanted in a new house. These glaring defects in contemporary houses served only to strengthen these beliefs. When we built a house, so we thought, there was to be a room for this, a room for that, a hall so big, and plenty of closets—there were never enough closets. By reading various house decorating magazines we had a smattering of notions and many strong likes and dislikes. To build a house seemed quite simple. You sat down and drew a box, divided it into rooms, added a roof and a garage, balanced up the positions of windows and doors and that was it. An architect was probably necessary to tell you how strong the beams had to be and how to plan the plumbing.



Somehow architects seemed like a luxury. If we only knew a little more about it we might not need one at all.

This spell lasted until we went to our local architect. We had a lot to build on and had sat down to draw, but somehow hadn't come up with a very satisfactory plan. Our experience was something like that of a man going to a doctor for the first time with a serious but curable disease. Our architect introduced us to a whole new world of human experience. There are all kinds of architects, just as there are all types of doctors. And among architects there is the same shift to the special ties that has characterized all the professions. We found that the family doctor of the architectural world is the one who is interested in family homes. Like the general practitioner, he is patient, willing to put up with numerous emotional crises, and subject to long and irregular hours while attending to your affairs. He probably will not be found among the academic brethren of his profession, nor will he be part of a busy firm of architects. Those who are creative and have a passion for their work are few indeed. We were fortunate

in having gone to such a person.

Our relation with our architect became one of teamwork. The strong likes and dislikes which we had were submitted to closer analysis insofar as they bore on the three-cornered compromise which is the heart of house building: viz. budget, space, and style. Since budget is usually fixed, space and style must be balanced one against the other. A good architect will find ways of utilizing space without waste and with many overlapping functions. The style of a house has to do with the type of materials used as well as with window size and roof shape. A clever use of old or new structural elements—a brick wall, a sloping ceiling—can often create the illusion of area and quality without increasing cost.

We have often been asked how much we contributed and how much the architect was responsible for the various features in our house. We like to think that we had a great deal to do with the planning. The choice of exterior, the type of roof, the size of the living room, the interior finish, window arrangement, and many other details were our ideas, we think. And yet when we visit other houses by our architect we see how

much the picture which is created is his house. The scale of masses, the one-fourth inch motive in trim, the balance of wood, stone, and brick—these are things which give a total impression. These are certainly the skill of the architect showing clearly, that it is his house too, just as much as it is ours, and this is as it should be.

A year and a half after initial plans were launched we moved into our new house. Instead of a traditional type it is more nearly a contemporary modern dwelling. This about-face in our thinking which occurred took place in stages. One of the first of these was the influence which construction techniques in modern houses are having on people's practical sense. Although we did not like modern houses in general, there were many features of these curious structures which we did admire. This led to a search in the public library for books on both traditional and contemporary architecture. One of these, "The House of Tomorrow," which is not about a single house but is an essay on the different features of newer building methods, had a profound influence on us. Another shift in our thinking was brought about by pushing doorbells and inviting ourselves into various modern houses which we had watched being built. Their owners are a most hospitable group of people who like nothing better than to convert you to their way of living. They are frank to point out the shortcomings in their houses but these are greatly overshadowed by the good features which abound in every detail. From this systematic empiricism and the help of our architect has come a contemporary house.

A serviceable house today, whether of contemporary or traditional design, is a highly integrated machine. It is made up of a specialized external protective and insulating coat, a receiving region, consuming areas, fluid and solid waste disposal



*Informal playroom fireplace in soft-toned brick from Epping, New Hampshire*

devices, a quarter of a mile of pipe, two miles of wire, ten to twenty electric motors, and numerous bits of glass, metal, plywood, plastics, stone, and lumber.

The first problem which had to be solved once a suitable location had been found for our house was our space needs. We took an inventory of family activities such as eating, sleeping, entertaining, playing, and the storage of accumulated possessions. From these we projected the ways any one room could serve more than one purpose. For example, we found that a common room, not a living room, was the next most important space to the kitchen. These two rooms were very carefully planned. The common, or play room, serves as television room, children's play area, children's entry in the winter when wet clothes are a problem, and an adult party room which is relatively indestructible. It also contains a large fireplace which doubles as an incinerator.

The most unique part of the house is the kitchen. Here the desire to have adequate storage and counter area for the kitchen and laundry facilities, if satisfied, would have required a very large room. By placing the stove in the middle of the room and making the room triangular in shape, many problems were solved. The whole was made interesting by having the stove the same shape as the kitchen. This location places the stove, sink, and refrigerator within one step of each other.

Once the space and use allocation was determined, we reviewed our existing possessions in the form of antique furniture, appliances, and other chattels. Wall storage, necessary wall surface for furniture, and room size which would place chairs within conversational distances were determined. This included provision for enough space between a chair and windows so that the back of one's neck would not be frosted in winter (it's two feet). We did not make a scale model of the house and furniture, although this is often done,



*Central stove and hanging cupboard which mimic shape of kitchen*

especially if one's visual imagination is shaky. In retrospect we can say that we came reasonably close, but not so close as did the architect, in visualizing from drawings just what the house would be like.

Only after this phase of planning had been done did the style receive serious attention. It was at this point that we began to look into the nature and purpose of windows. The one feature of modern houses we were sure we wanted was a large living room picture window. Thereupon we came face to face with current architectural thinking which conceives of a house not only as a tailor-made machine for living but also as having a powerful impact on the five senses. The treatment of window design is perhaps the most characteristic feature of contemporary houses.

The evolution of the size of windows, we soon discovered, has been greatly influenced by the technology of glass making. Colonial windows were small because the glass was hand-blown in bubbles, these cut open, flattened out, and trimmed. Before taxation on the basis of the number of window panes tended to restrict the free use of glass, many fifteenth and sixteenth century houses were built with the equivalent of modern picture windows composed of many units. Machine-made glass

in large sizes was available long before sash makers shifted to less complicated fenestration. The real breakthrough in window design, however, was brought about by store fronts with their large fixed panes and accessory smaller ventilating units. Store windows traditionally have been of polished plate glass and are prohibitive in cost for home construction. There is now available, however, double thickness window glass at moderate cost which is the basis for the rash of picture windows going into all sorts of houses. Although sash makers in the East still make only stock sizes, this is not true in California where window sash to order of any dimension can be had at no additional cost. Our desire to have a picture window became the focal point in our shift from a traditional to a modern house. At first we planned several panes in the big window, but found that the glass comes in floor-to-ceiling heights which would have to be cut anyway. Furthermore, elimination of additional mill-work by having just one pane evened out the cost. We also found that a fixed pane of glass has the insulating quality of a four-inch brick wall. With a drape which is pulled at night to create a dead air space the window is no greater a heat loser than is an ordinary wall, while in the day time the heat gain from the sun is enough to keep the thermostat off in the living room on most winter days.

Once we had accepted this modern feature of window construction we found we had created the necessity for counter-lighting from the opposite wall or at least from one of the side walls. In the traditional house this difficulty is often solved by translucent curtains, over-drapes, and various types of blinds, all of which compromise the original value of the large window. It is not too much light that is wrong with the single large window, but glare. When sufficient light comes from the other windows in the room, drapes are unnecessary because glare is eliminated.





*Living room fireplace flanked by shelves and by loud speaker above hi-fi equipment cabinet*

Thus we found that if we were to have our picture window and be logical, we would of necessity have to have other large windows in our living room. And if we did this we no longer had a traditional house.

This principle of glare also applies to the multi-paned colonial window, but its correction is not more but less light. In an undecorated room of a traditional house perhaps fifteen per cent of the walls represent window area. The marked contrast created by this small proportion of lighting is commonly met by shades, glass curtains and over-drapes which in effect reduce the room to a grotto with hardly more than five per cent effective area. Even so, looking directly out the window is much like looking down a cannon barrel. Some of this dimness is counteracted by avoiding dark colors and heavy woodwork and by painting as much woodwork white as possible. The dilated pupil and eye fatigue are just one of the antiquated features of current traditional practices.

We soon found that there are other logical sequences which follow on the use of large windows. Where-

as in the traditional house we are limited to light woodwork and light colored curtains, in the modern house with good lighting a much broader range of color is possible. Furthermore, with ample light full advantage of intrinsic textures in building materials can be realized. A whole wall can be of a soft-toned brick and not look dark. The grain of dark and light woods takes on character. The weave of carpets and upholstery gains in effect. And of course the expansiveness of the changing outdoors as seen through large windows is a more appropriate picture than can be hung on a wall.

This entering wedge into modern architecture which our desire for a picture window created soon converted us to the use of large windows throughout the house. In this respect we were both logical and physiological. Accepted modern industrial design also calls for the equivalent of outdoor daylight wherever people are to work efficiently.

We were not so easily won over to modern thinking when it came to building features which affected the

ears. The emptiness of some modern houses reminded us of the hollow ring in a traditional house without furnishings and vaguely of earlier unpleasant moments spent dicker- ing with a real estate broker in an empty upstairs bedroom. It seemed as if a house with great windows perforce must seem empty. In the traditional house echoes are banished by covering their honest oak floors with carpets, by draperies, by crowding the rooms with furniture, and by covering the flat expanses of wallpaper with the most incredible variety of things. It all adds up to a certain calm which is effective, if not cumbersome, sound conditioning. In the modern house sound can be controlled quite as well by a number of devices. For example, our plaster is made with vermiculite instead of sand. Wall-to-wall carpets on concrete which doesn't show are used in floor areas which are not thoroughfares. Rubber tile serves a similar function. Broken wall surfaces, wood paneling, insulation in ceilings, growing plants, and open spaces themselves all suppress noise without the necessity of quantities of bric-a-brac. It is surprising how it has been possible to have open, light, uncluttered rooms which have a quiet coziness as well. It was in this more technical phase of design where our architect was able to help us the most.

To be consistent the house planner should apply the same insight to house odors that goes into light and sound conditioning. We felt it was imperative that the kitchen, which is the main source of odors, be a separate room. A kitchen exhaust fan helps further to insure this separation of cooking from other household activities. Another of our deodorizers is an attic fan set in a dummy flue in the chimney. This gives us an air wash under the roof to control summer heat; by the opening of an interior panel it gives a clear atmosphere in the living room even during the most smoky cocktail party. We have not taken full advantage of all the modern methods now available for climate control, such as air wash-

ing and filtering which some day will be commonplace. Nor have we gone modern in humidity control (we wish we had it). In the completely modern house the air would be dust-free, house cleaning would be simplified, and windows would remain sparkling clean. With a controlled humidity of 50 per cent in winter and with air conditioning in summer, woodwork would not crack and table leaves would stay flat. Most of all, the survival of viruses and bacteria in the arid reaches of the American home during the heating season would be relatively impossible. It is abundantly apparent from the inroads of intercurrent respiratory infections into the health of modern man that the few thousand years since his egress from the humid jungle have been too short a time phylogenetically to equip him for the rigors of central heating and 10 per cent humidity. Some day the clinical and climatological society should take time out from its metabolic deliberations to investigate the trauma and the lyophilized germ warfare being directed against the human respiratory mucosa in these barbaric times.

After our first two conversions to modern thinking it was relatively easy to be sold on radiant heating. Although radiant heating is not modern—it was used by the ancient Romans to heat their baths—it is not often seen nowadays except in contemporary houses. We have it in our house, and now that we have lived with it we cannot praise it enough. With the floors and ceilings heated, rooms are uniformly comfortable. It is deceptive for us to guess how cold it is outdoors in winter, as one can do in the traditional house, where the floors are drafty and cold while the air temperature at head height is above 70°F.

This appeal to the senses of warmth is not only a matter of how the house is heated but is also a function of insulation. A four inch insulating layer of vermiculite under the concrete slab prevents heat loss in the winter and floor condensation in the humid summer months. Ver-

miculite in the plaster has a similar effect. Fiberglass and aluminum foil, along with dead air spaces in the walls and above the ceilings, further protect us in both winter and summer. These simple devices add not only comfort but economy to our heating needs.

An appeal to the senses also has been the basis for the shape of our house. Since the remaining sense, that of taste, can hardly be applied in its literal sense to a house, the metaphor breaks down at this point. There is taste in house-building however; and in modern houses it is just as important as in other integrated styles of architecture. Our architect taught us the meaning of scale, by which he means sense of proportion, windows and wall areas are balanced masses. Where asymmetry is present, as in the fireplace wall, it is a symmetrical, or consistent, asymmetry which design-wise is much more difficult to achieve than is a repetitive pattern. These principles of scale were also applied in the kitchen by using counterfront matching ply panel, front pivot hinges, hardware-free cabinet constructions, and formica and stainless steel working surfaces. Scale also

applies to textures. Our bluestone floor has a more pleasing texture than does flagstone. The long subdued strip figure of quarter-cut African Korina wood which we used for paneling the living room has a better scale than the wild figure of Rhodesian mahogany or the aimless expanses of birch which are popular wall coverings. The naturally buff-colored Korina is trimmed with its complimentary color, the purple-red Amaranth from British Guinea. This hard, beautiful dark wood also covers the built-in sideboard, giving it just the right amount of a color foil for the larger areas of blonde wood. And because there is abundant light from the large windows it does not produce a dingy effect. It is further set off by tinting the limited wall areas of plaster and the ceiling with a trace of these same colors and by using a complimentary green for draperies.

Much of the taste in modern houses has to do with the use of natural woods. With better lighting, their texture can be appreciated. In our house we, too, have used woods and modern plastic finishes extensively. The hall walls form a series of storage



*Antiques and music overhead, set off by studied simplicity in the built-in sideboard*





*Geometric bannister as a foil for simple treatment of natural wood paneling*

cupboards. These are done in handsome quarter cut primeval hemlock flooring from Oregon. This weed tree of the great Douglas fir forests of the Northwest, when properly used, has a sheen and texture in buff brown free of the orange range of colors which we wished to avoid. So close is the grain that there are often a hundred and fifty years of growth represented in a single three and a half inch board. It is just this softness of texture and subtle scale which is appropriate for a hallway. To go with this wood and as a trim wood we chose Amarillo which has a smooth textured grain. This wood comes from the Amazon watershed which has a timber reserve so far hardly explored. Its initial yellow color changes to a rich nut brown on exposure to light and air, much as do many tropical woods. In rift and quarter cuts it has a figure similar to that of Honduras mahogany.

From various commercial sources and with the help of a few grateful patients from different parts of the country, we have assembled other types of wood: tidewater hard cypress from Louisiana, burl rock maple from Pennsylvania, California redwood, and native oak. The play room is done in Amarillo and the

*Photos by Walter Fleischer*

study in cypress. One combination we did not use, which has a great deal to recommend it, is Asacu from the Amazon set off with a moderate amount of trim in American black walnut. Spanish cedar and African mahogany have much to be said for them where the red range of colors is being used.

These woods are all available and at reasonable prices. They are less expensive than conventional plaster, paper, and paint. Furthermore, they can be installed by the amateur, affording both recreation and a further saving in the house budget.

Now that we have lived in our modern house for three years, we are more than ever convinced that the change over from traditional architecture was a sound one. Any regrets we have had are simply that we did not go far enough. If we had not

wanted a picture window we might not have embarked on this sequence of revisions in ideology. Perhaps it also can be said that if we had not been so logical about the picture window we might not have followed this line of thinking and would have built a traditional house instead.

This certainly is a fabulous era in which to build a house. Within the dimensions of the small family dwelling it now is possible to have the equivalent of much more usable space; to live without offense to the eye, ear, and nose; to be more healthy; to please the spirit with the many good materials drawn from a bountiful nature, and to have mechanical servants which do the work of a corps of persons. It is no exaggeration to say that there is now in progress in America a revolution in house designing.



*View of natural forest and sentinel pine from living room*



and delightfully readable essay on surgery. Another suggestion by Cushing incorporated in the book was the short informal historical sketch preceding each chapter. It contributed both to the charm and the interest of the book as well as to its immediate success with the students and teachers everywhere. Notice that

anthropic mood, he wrote of women patients, "Now pain in the left lower abdominal quadrant is, so far as I know, the most baffling symptom known to surgery and occurs as a rule in females of almost unparalleled dreariness." Such a textbook naturally met with almost immediate success and in a few years it was the accepted



J. F. Perkins

Dr. John Homans


had been omitted. It would be unreal, on the other hand, to do away with them entirely, for they have always formed an integral part of the man. Woven through his whole life was the bright silver thread of humor bringing out the pattern of his inherited traits, his training and his malleable, changeable, sometimes tempestuous personality.

Born in Boston on September 2, 1877, educated at Hopkinson's School in Boston, and graduated from Harvard College with an A.B. *cum laude* in 1899, John Homans led his class at Harvard Medical School, graduating in 1903. Following this, he was a House Pupil in Surgery at the Massachusetts General Hospital for eighteen months and assistant to Maurice H. Richardson, then the Moseley Professor of Surgery, and the most prominent surgeon in Boston at that time. This association was an inspiring one and undoubtedly a great influence on his subsequent career. It was Richardson who sent the young Dr. Homans to Baltimore in 1908 to work with the budding genius Harvey Cushing, a move which no doubt decided his ensuing appointment to the new Peter Bent Brigham Hospital where he spent the rest of his professional life. When Cushing in 1912 was appointed Surgeon-in-Chief to the Brigham, which was not yet completed, almost his first act was to select John Homans and David Cheever as his assistants to help with the teaching and the care of patients on the general surgical wards. While waiting for the new hospital to open, Dr. Homans, probably at the instigation of Harvey Cushing, spent a year abroad working with Professor Starling in London. At the Hunterian Laboratory in Baltimore and also with Starling he was encouraged to pursue original research first on the hypophysis, then later on the pancreas, and his publications in that early formative period reflect these interests. One of the most significant contributions from this early period was the work on diabetes and the pancreas, three papers published in 1913, 1914 and 1915. If this research work had been carried a little further he might have discovered insulin before Banting and Best. As it was he turned to clinical problems and his publications for the next few years deal with a variety of subjects ranging from head injuries and empyema, both timely in 1918, to cancer of the colon. From 1913 to 1946, Dr. Homans was Surgeon to the Brigham Hospital, except for two years in the first World War when he was a major in the medical corps of the Army, and one year (1936-37) when he was loaned to Yale Medical School to act as William H. Camalt Professor of Surgery, while the regular incumbent, Samuel Harvey, was on a year's leave of absence. While at Yale he was given rooms in Daven-

The news that John Homans had died during the night of June 7, 1954 brought sadness and poignant memories to many people in many parts of the country. Chief among them were his classmates and colleagues, but there were also many generations of Harvard Medical students and Brigham house officers with vivid memories of this unusual man. Whenever two or more of those who mourned his demise brought up his name there would inevitably follow one or more anecdotes concerning his wit, his behavior, his peculiarities or his temper, any or all of which might be apocryphal or at least considerably distorted by time and memory. Many of the stories, however, were well grounded in fact and attested to by witnesses. Many of them, unfortunately, are not suitable for publication, even in such a liberal journal as our Alumni Bulletin. Others may have happened to a different person in some far distant place, but John Homans was the kind of individual who naturally attracted attention and upon whose shoulders certain types of stories could be hung.

It is hazardous to select a few anecdotes as being most illustrative, for many readers would feel that better ones

\* Much of this material has been taken from the Memorial Minutes prepared for the Faculty and from Richard Warren's obituary, and Daniel Elkin's John Homans Lecture, both previously published in the *New England Journal of Medicine*.



ster Tinker in 1936 was Sterling Professor of English Literature, a colorful soul, a Johnson scholar, and one of Yale's first citizens. As a Fellow of Davenport College he saw a lot of John Homans, who was also a Fellow there, and John and Tink, who were about as different as any two mortals could be, got on famously. Dr. Cushing was immensely amused by their friendship and concluded that it stemmed in part from the fact that Tink provided a new audience for John's old Boston jokes!"

He made the imprint at New Haven that could have been predicted. For a Boston Brahmin and Harvard professor to become in a single academic year one of Yale's most popular and best remembered teachers truly reflects the character and personality of the man. In his later years at the Peter Bent Brigham Hospital he was consulting surgeon (1940-42), acting surgeon in charge of circulatory diseases (1943-45) and Surgeon *emeritus* from 1946 until his death.

Both Dr. Homans and Dr. David Cheever exemplified the medical heritage and tradition to be found in some of the older American communities. John Homans was the fourth of that name to practice medicine in Boston, and his son who graduated from Harvard Medical School in 1941 is now carrying on the family tradition. This medical dynasty has served its country in every major war, beginning with a regimental surgeon in the Continental Army, whose commission bears the signature of George Washington. His grandson, whose commission was signed by Abraham Lincoln, served both the Army and the Navy in the Civil War. The fourth John Homans, M.D., whom we honor today, served in France as a major in the Army Medical Corps, and his son served in a field hospital in the South Pacific zone during World War II. Such a heritage may engender family pride, but it also carried an obligation of accomplishment and duty of service.

His score in the field of accomplishments was excellent. Some results were tangible but many were intangible. In addition to his many contributions in the field of general surgery, made mostly before 1928, he was one of the leading figures for over 20 years in the study and treatment of vascular diseases of the extremities. Some 45 of his publications out of a total of almost 100 deal with problems of vascular disease of the extremities or its complications. The knowledge and experience thus acquired culminated in his monograph "Circulatory Disease of The Extremities" published in 1939. Throughout most of his life he was a strenuous advocate of what his colleagues Henry Christian, Harvey Cushing and others of their generation both preached and practiced,—good bedside medicine. Their

patient's ability or capacity to dilate the vessels in a suspected extremity there was no call for plethysmographs or thermocouples in John Homans' text but rather the simple statement that "A stiff drink of whiskey or any strong liquor is, except for the corruption of the individual, an admirably simple and practical method of testing the ability of the vascular bed to dilate." Note that his prescription was not given in ounces or cubic centimeters. Anyone should know what a "stiff drink" is!

A major accomplishment of his career was the completion and publication of the monumental "Textbook of Surgery." The idea of a Harvard Textbook of Surgery was conceived by Harvey Cushing. He sold it to "Jack" Homans with the innocent suggestion that it would be a relatively simple matter to collect all of the lectures then being given annually to the Harvard Medical School students, edit them, correlate them, and publish the collection as a textbook. Cushing was a past master at stimulating everyone around him to undertake either investigative or literary activity, and it worked again in this case. The lectures were eventually collected, but some were mere notes of synopses for talks while others were literary essays. Still others were but lists of diseases, symptoms and operations with little or no value for the book. Others were missing when the survey of progress was made, among them being Cushing's own material! Again, however, the silver tongue of the persuader was effective and Dr. Homans embarked upon the project determined to make it succeed and to make it worthy of the men and institutions who were sponsoring it. At one time, however, when his spirits were low, he confessed to Dr. Cheever that he hated everybody in the Brigham, everyone in the Childrens Hospital and everyone in the Medical School too!

Fortunately for the success of the book, its author was not particularly interested in either a large or remunerative private practice, nor in the erudite fields of pure research. This left him plenty of time and energy for the arduous work of compiling, editing, correlating, annotating, verifying and arranging the tremendous mass of material which finally appeared in the 1100 pages of the book. Like Joseph of old he worked seven long years before the fruits of his planning and his labors ripened. The lectures given by his colleagues turned out to be so variable in content and diverse in style that they had to be entirely rewritten to make them not only uniform but also complete and authentic. The book thus became not a symposium, nor a collection of lectures with innate contradictions and glaring inequalities of context and emphasis, but a well-rounded all-inclusive



and delightfully readable essay on surgery. Another suggestion by Cushing incorporated in the book was the short informal historical sketch preceding each chapter. It contributed both to the charm and the interest of the book as well as to its immediate success with the students and teachers everywhere. Notice that "students" come first, for John Homans had them always in mind, and it was for their education that he wrote, not for the plaudits of his colleagues nor the mere pride of authorship. He alone was the author "supreme dictator to reject or choose, employing what he took but as a tool." The flavor of the book is that of the salty character, compelling honesty and forthright speech which characterized him.

There were several other unique features about the book in addition to the charming and thought-provoking historical or anecdotal introductions. One of them was the use of many line drawings and sketches by Willard Shepard, a former pupil of the dean of all medical illustrators, Max Brödel, whom Homans and Cushing had both known at Hopkins. These illustrations almost completely replaced photographs throughout all six editions of the book. Unfortunately, Shepard was led to perpetuate an anachronism by labelling his sketches drawn from roentgenograms "After an x-ray plate"! This, however, reflected only the period of the author's training and not a lack of erudition. Another feature was the clarity and lucidity of expression, at the same time showing restraint with respect to imaginative license. Dr. Homans, in his preface, calls some of the matter "merely diverting", but the reader, especially if an omnivorous medical student, had his interest and attention repeatedly stimulated by unexpected shafts of humor or facile expression. Of mercuriochrome, much in vogue when the book was being written, he wrote, "It is a good antiseptic for minor wounds and stains the parts a bright red." Concerning gastrointestinal disease in general and obstruction in particular he wrote "a stomach tube about the neck of a house surgeon is more useful than a stethoscope. Possibly it saves more lives." And in the chapter on tuberculosis he epitomized it as "an ancient and respectable disease."

Some of the short historical introductions are classic. One of the best known and most often quoted was the one concerning the involuntary but important part played by women in the growth and development of the art and practice of surgery. "Woman has been subject to many crucial surgical experiments. The earliest trial battles with bacteria were fought in midwifery, and the first steps in abdominal surgery were taken in attempting to heal by operative means the great ovarian cysts, which for ages had carried endless disability and suffering. It is now almost impossible to imagine the number of invalids with swollen abdomens and drawn, pinched faces who were ready, when surgery could give even a fighting chance of relief, to offer themselves for a hazardous operation."

On the other hand, in a less charitable or more mis-

anthropic mood, he wrote of women patients, "Now pain in the left lower abdominal quadrant is, so far as I know, the most baffling symptom known to surgery and occurs as a rule in females of almost unparalleled dreariness." Such a textbook naturally met with almost immediate success and in a few years it was the accepted text in surgery for a majority of our medical schools. Dr. Cushing, who was in a way the godfather to the book, reviewed it for the *New England Journal of Medicine*. He gave credit to Dr. Homans for authorship of the book although many men on the faculty had made contributions early in its development. As usual he bestowed both criticism and praise, but characterized it by concluding that "For here is a book about surgery to read, the like of which to the writer's knowledge has not been produced in modern times. . . . The Irishism that Osler's "Medicine" was the best existent work written on surgery has often been repeated. It was a book, in other words, that the surgeon could not well be without, for sanely and picturesquely it gives just the sort of information about his colleagues' problems and point of view that he needs to have at hand. And so far as concerns the undergraduate student for whom the book is primarily intended, this is a book, like Osler's, which is as easy reading as a novel. . . ."

One of the most valuable by-products of the book was its influence and effect upon the author himself. Its success gave him confidence and the rigorous mental discipline with its broad coverage of all of surgery gave him an added facility in thought, speech and action in dealing with everyday problems. He was a much better diagnostician, a keener observer, and a sharper analytical thinker because of this seven-year discipline. In short he evolved during this period from an ordinary surgeon to the status of a consultant in fact as well as in theory. Similarly his teaching, his writings and his self-esteem (which needed frequent nourishment) were all improved as a result of this accomplishment. It consolidated his standing in the academic world and gave him a broader outlook on the whole field of medicine than many of his colleagues enjoyed at that time.

One of the greatest regrets of his later years was the fact that he could not persuade a good young surgeon to take up the book and carry it on with thorough revisions to keep it up to date. The reasons were not difficult to find. The book was so definitely his, and was so saturated by his own inimitable personality that none of the younger men of ability would risk the effort. This, however, should not be considered as the death of a book, but rather the establishment of a lasting memorial, all the more vivid and brilliant by being preserved intact. It can be said of John Homans' Textbook of Surgery as truly as Lord Halifax said it of Lord Lothian: "The fruits of his labor are now in full view for all the World to see, and I think he would have wished no other monument."

His third great accomplishment, and possibly the greatest of the three, was his influence on Medicine and

medical education in his more than forty years of academic service. Many generations of Harvard Medical students came to know him and love him and quote him. His colorful character was indissolubly linked with his native ability as a teacher. Much of this was inborn, inherited from similar dynamic ancestors, but there was laid upon his chromosomal foundation the variable pattern, intricate and difficult to trace, of environmental influences. When his mercurial temperament exploded, as it often did in an unpredictable manner, it could give a quick and violent hurt, but it was always followed by a quick and heartfelt apology if injustice had been done. This occurred most often during operations and was no doubt a safety valve for his pent up emotions, which might, if things were going better, be expressed with a snatch of Gilbert and Sullivan, so thoroughly learned in London many years before. He himself wrote in his *Reminiscences* "But surgeons were not then expected, as they are today, to conceal their emotions. This was, perhaps, a safeguard for their patients. For letting off steam upon their assistants may well have allowed them to consider more judiciously their immediate human problems. But they (the senior surgeons such as Maurice Richardson under whom he worked and whom he imitated) set us young fellows a bad example of irascibility and strong language which many of us have failed to throw off." Whatever the explanation, and justified or not, such traits along with frequent cuss words, made his teaching rounds and clinics high points in the lives and memories of many students.

Dwight Harken tells of a classmate's first experience as a student assistant in one of Dr. Homans' operations. The student was unusually large, and his first assignment was to hold a retractor in the abdominal wound. Dr. Homans wanted him to ease up on the retractor so he tapped it twice, but the student misunderstood the signal and pulled harder. Dr. Homans then rapped the student's knuckles as a signal to let go but again the student misinterpreted and pulled even harder. Alarmed, and fearful that the patient might end up on the floor, Dr. Homans seized the retractor shouting, "Young man, you may be bigger than I and more powerful, but I have the authority. Now let go of that retractor, damn it."

Character in some persons is completely and unchangeably inherited. In others it is almost completely acquired or self made. In most of us it is a changing medley of both influences. John Homans' character and personality were of such a mixture. A slight stutter and a definite characteristic lisp at once set him aside from other teachers in the faculty. In addition his direct approach to problems, his skepticism as to his own knowledge and ability, and his complete honesty at once endeared him to his audience. Dan Elkin gives an example of this remarkable honesty. When asked if he had ever accidentally cut the common bile duct, Dr. Homans replied, "I am probably the only man alive who has cut the common bile duct twice in the same patient, and, moreover, in the same operation." His occasionally

uninhibited response added the spice of unpredictability to his utterances. He was the possessor, like his bosom friend Amory Codman, of what Burt Wölbach called "an afflicting conscience," which often affected his decisions. Some of these decisions were not in his own favor, for he was prone to disparage his own ability and on occasions frightened patients away by unnecessary self-deprecation. More than once he was heard to greet a new patient with "See here, what is it that makes *you* come to see *me*?" implying by manner and tone that it was a risky thing to do. And when he moved his office in 1952 he surprised his new part-time secretary by appearing in his work clothes spattered with paint and announcing in a characteristic manner, "You may not believe it, but *I* am Doctor Homans."

Known to many generations of Harvard Medical students as such a character, he was of course caricatured in every Aesculapian play. This added to the aura which students use to frame their exceptional teachers. Some of the more apocryphal stories and anecdotes may actually have originated in these plays, but John Homans enjoyed them all and laughed as heartily at his own foibles as anyone else. He was, in fact, fond of quoting Will Mayo's remark after a visit to the clinic in Rochester, "We dislike to see you leave, John; we were just getting used to you."

Much more intimate and personal was the contact between the surgical house officers and their uninhabited senior surgeon. Nearly all of them look back upon their apprenticeship with fond memories, but not a few bore away the scars of stinging or sarcastic rebukes during critical periods in the operating room. If they were due only to temperament or to the heat of the battle they were promptly followed by an apology, but not if carelessness, evasion or inattention provoked it. Some of the young men feared him, a few hated him, but most of them admired him and a few of the best came to know him well enough to love him. One of the latter wrote frankly of his experiences: "I first met Dr. Homans when I was filled with youthful romantic illusions. He quickly knocked them out. I found him as salty as the Sacred Cod—a salt that has never lost its savor. Here was a man to be trusted immediately. His criticism has rarely been gentle but has always been truthful—severe, indeed, but flavored with that saving humor. If he has hurt feelings on occasion, it was a thorn without a barb, a candid expression reflecting simplicity of thought and rectitude of soul."

The story most enjoyed by Dr. Homans concerned the house officer who was helping him one morning in an operation. Noticing the man's evident uneasiness and restlessness across the table, he looked up over his split-glass spectacles in a characteristic way and inquired, "What's the matter with you?" The intern's reply that he thought he had not tightened the string of his trousers sufficiently to hold them up and that they were slowly falling down led Dr. Homans to turn immediately to the circulating nurse with the remark, "Nurse, go get a safety



pin and pin up this man's trousers." In great embarrassment and with quite a red face she proceeded to take a tack in the back of his trousers with a safety pin. Silence descended upon the operating room for a few moments. Suddenly Dr. Homans looked at his assistant again over his glasses with the remark, "I don't hear you saying anything, young man." "What is there to say?" To which Dr. Homans replied with a twinkle in his eye, "The least you can do, I would think, would be to say 'Thank you very much. I hope I can do the same for you someday.'"

To his colleagues at the Brigham and in the Medical School he was known and appreciated for his brilliant and productive career. He was never afraid to admit that he did not know the answer to a given problem, yet he was, up to the very end of his life, eager to learn it if possible. He never bluffed and he detested intellectual or factual dishonesty. It was as natural for his associates to call him "Honest John" as it was for the students to call him "Uncle John," as other students had called his father before him. His colleagues were impressed by his singularly free imagination in thinking about disease and its mechanisms, refusing to be limited in the scope of his thinking by the half-knowledge which pervades so much of Medicine. "Maybe that isn't true" was one of his frequent answers to an irrefutable argument.

Rarely was he at a loss for words or action appropriate to the occasion. One of the few times he was completely baffled is noted by Bert Dunphy. Dr. Homans had examined a woman's breast and, thoroughly convinced it harbored a cancer, performed a radical mastectomy without relying on proof by biopsy. The following day he left town to attend a medical meeting and did not get back until four or five days later. On inquiring of the resident how each patient was progressing, the tactful senior first gave him all the good news he could muster, and then informed him that the final microscopic study of the amputated breast revealed not cancer but only fat necrosis and induration. With characteristic honesty Dr. Homans went at once to the bedside of the patient and informed her in the presence of her husband that she did not have cancer at all and that he had needlessly removed the entire breast. Neither the patient nor her husband seemed to be disturbed by the information. Thinking they had not understood he repeated his statements, castigating himself for being so cocksure. This time the patient smiled and said, "Do not be upset, Dr. Homans, for how could you know that the night before the operation we called a Christian Science reader to come and spend some time with me, changing of course, the nature of this cancer to the other condition. Since I did not inform you of this, how could you tell that it was no longer cancer?" Completely abashed, Dr. Homans left the room speechless and thereafter rarely referred to the incident.

All these influences upon the course and development of Medicine and Surgery through the teaching of stu-

dents, house officers and colleagues, form probably his greatest contribution and achievement in his long and productive career. They form the potent but intangible forces which guide and direct progress toward the light of truth, to which he was devoted.

Throughout the latter half of his career, he concentrated most of his efforts to the consideration of vascular diseases of the extremities. His book on Circulatory Disorders, published in 1939, was not the culmination of his experience but a guide book for others to follow. Although he kept up with progress in all fields of surgery, and revised his text book through six editions, the last one in 1945, his chief interest from 1932 on was in vascular surgery. He maintained a keen interest in both the experimental and clinical fields, so much so that he was given the unique position and title of "Consulting Surgeon", later "Acting Surgeon in charge of Circulatory Diseases", covering the period from 1940 through 1945 when he would ordinarily have been retired as *emeritus*. Some of his most delightful papers were written during this period, in particular his address at the dedication of the Yale Medical Library (1941), his Aesculapian Club address, "Three Thousand Years Ago" (1948), and some "Reminiscences", the last to appear from his facile and productive pen in 1950. One other outstanding lecture, The George W. Gay Lecture on Medical Ethics, delivered in 1940 and published privately only at the insistence of the group of students who heard it, also deserve more than passing mention. It was a self-revealing intimate *credo*, tongue-in-cheek in places, poking a little fun at pretensions in others, and a *confessio medici* throughout. It is as well worth reading today as when it was published. Among the many jewels are his description of "good" and "bad" patients,—"A 'good' patient is one who has an interesting ailment capable of cure and at the same time continues to look pleasant, understands directions, asks very few questions and never complains. A 'bad' patient begins by telling a poor story, full, not of fact, but of the alleged opinions of many physicians, is not easy of diagnosis and contrives to irritate and bewilder the attendants. Such a patient complains continually, asks questions innumerable, and whether things go well or ill, never gives the attendants the satisfaction of seeing her made happy. There are, of course, degrees of 'badness'. Some patients are 'terrible' while others are just 'difficult'. The truth is that they are all 'sick'."

Even greater color and the sound of music run through his "Reminiscences", but for pure scholarly achievement his Yale Medical Library Dedication address was his *vade mecum*. He was the principal speaker in the impressive ceremony which included the president of Yale, a member of the corporation, the dean of the Medical School, and makers of poems and prayers. Unfortunately when Dr. Homans donned his academic robes for the procession he laid aside his coat containing his eyeglasses, without which he thought he was help-



less to read ordinary print. But in the midst of his panic at finding himself without his glasses, he suddenly realized that he could read his typewritten address with his left eye, which, as he explained later, must have changed from myopia to presbyopia without his realizing it. By carefully focussing this one good eye at arm's length, and of necessity using a slow careful delivery, he was able to do his address full justice, creating a most favorable impression in so doing. On this occasion Harvey Cushing, who had died two years before, was singled out for special honor, as his unique collection of medical incunabula was in the nucleus for the library. Out from under the shadow of "H.C." for the first time in thirty years, Dr. Homans started his address by quoting Dr. Cushing's facetious opening remarks at a similar occasion,—the dedication of the Welch Library at Hopkins—and then went on to say, "I must enjoy a little my own impertinence. For the author (Cushing) always, I think, felt very dubious about my ability as a speaker, and was accustomed to regard me with an air at once anxious and critical whenever I rose up in his presence." Dr. Homans then presented his historical and personal essay concerning medical libraries in general, and Harvey Cushing's method in writing or acquiring some of the great medical books of the ages, in particular. He did not, however, refer to his impromptu remarks at the unveiling of a portrait of Harvey Cushing in his operating gown and cap. Those remarks were to the effect that the situation reminded him of his first sight of Venus de Milo down a hall in the Louvre—as both of them were in their working clothes.

Lest John Homans be considered a narrow professional man, it must be said that his avocations and hobbies were as numerous as his surgical interests. He was a devotee of upland bird shooting, usually in the company of trusted and tried cronies such as Amory Codman, "Mike" Farley, Henry James and other pleasant companions who could hold their own at bridge, at choosing a wine for dinner, or singing a roundelay of Gilbert and Sullivan favorites. At other times he turned his hand to fishing, or in later years to the grafting of fruit trees and woodworking in his own shop, where he was one of the pioneers in the "Do It Yourself" era. Although he played football and other sports in college, his real love was baseball and he was a loyal fan as well as an extremely vocal critic of the Boston Red Sox from the days of Cy Young to Ted Williams.

His taste in books was catholic, but his favorites, often quoted in lecture or conversation, were *Moby Dick*, Captain Marryat's *Midshipman Easy*, and Jane Austen's *Pride and Prejudice*. He read the works of Sienkiewicz, the military and naval chronicles as they appeared after each war, and, for diversion, the novels of Arnold Bennett and Wodehouse. For pure mental relaxation, he

was not above reading the murder mysteries. His likes and dislikes were vigorous and his prejudices could be violent. As time passed, however, opinions and passions were tempered. To the end of his life he enjoyed quoting Gilbert and Sullivan *in extenso* as well as various doggerel (or worse) which had been acquired with but not through his Harvard education.

In his *emeritus* years he was limited in physical activity by a disease which he had studied very thoroughly, intermittent claudication, quite painful at times and refractory to any of the remedies ordinarily employed for its relief. This was further complicated by a degenerative arthritis in one hip, which made locomotion not only difficult but at times quite uncomfortable. In spite of these afflictions he was frequently seen in the weekly clinics at the Brigham, often, in fact, taking part in the discussions. He would at times complain that his future looked very grim, for he expected his blankety-blank leg to dry up and fall off some day.

When seen at home during his first coronary attack, Dr. Homans attributed his previous episodes of substernal pain to "hiatus hernio", and stated that he doubted if any surgeon would undertake to operate on him. That evening while attending his 51st medical class reunion dinner, he had been seized by agonizing substernal pain. When informed that his examination indicated a coronary attack, he was silent a moment, and then said in a disgusted voice, "The Lord listens to every dodgasted word I say! Only tonight I told my colleagues that no Homans ever died of cardiovascular disease—and now look at me!" He was admitted to the Peter Bent Brigham Hospital. Myocardial infarction was confirmed by electrocardiograms, and he was following his own reasonably satisfactory course with a physiologist's interest, when on the ninth day he was found by the night nurse dead in bed, presumably due to a sudden arrhythmia. One of his many comments regarding the management of his terminal illness was in the nature of a reflection paraphrasing a statement of his father's, "There are only two things I regret; one, that I did not use morphine frequently enough in my practice; and two, that I will not be able to see my own autopsy."

Thus passed from our midst one of those rugged individualists carrying with him a record of achievement worthy of the honored name he bore, but whose departure leaves a vacant spot where color and music once existed. He leaves his devoted wife, the former Alice Fillmore Knapp, whom he married in 1913, a son, John Homans, and a daughter, Anne Shuttleworth Homans. We can but be grateful with them that so many of us were privileged to see and hear and enjoy bits of the life and works of John Homans, M.D.

MERRILL C. SOSMAN  
FRANCIS C. NEWTON, '19

# *The Tutorial Program at Harvard Medical School*

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The Tutorial Program, one of Harvard's earlier experiments in medical education, began in 1923 under the aegis of Dean David Edsall and Professor Walter Cannon. The introduction of tutorial instruction in the College just previously and a major revision in the Medical School curriculum to provide more free time for the student were two important instigating factors. The Medical School tutorial system was designed to provide the more capable students in each class with opportunities and encouragement to do research, not to provide assistance for students having difficulty with their regular courses.

Many students arrive at Harvard Medical School with a strong interest in research. Some have had research experience as undergraduates or as research assistants which may have directed their attention toward one particular field of investigation. Others have a general interest in research but only a vague idea of the sort of problem they would like to study. The laboratories of the Medical School and its associated hospitals provide a wealth of opportunities for student research; one of the functions of the Tutors is to bring together staff members and students with research interests in common.

Several methods of tutorial instruction have been tried since the program's inception. Originally, eight first-year men were selected each year to receive a special laboratory course in physiology given by the Tutor, Dr. Albert Redfield. In this course research methods and problems were emphasized to encourage research in subsequent years of medical school. About half of the students selected for this course did tutorial

research in later years with either Dr. Redfield or with other members of the Faculty. Some of the students who participated in this program and have continued careers in research are Thomas Coolidge, Oliver Cope, John Edsall, John Fulton, Magnus Gregerson, Chauncey Heath, Valy Menkin, William Salter, John Talbot, and Sir Giles Thomas.

Dr. Redfield resigned in 1930 and was succeeded first by Dr. Philip Bard and then by Dr. Arturo Rosenblueth. Later the special course for tutorial students in the first year was abandoned and two additional tutors, Dr. Walter Bauer in Medicine and Dr. James White in Surgery, were appointed to widen the scope of tutorial guidance. These tutors served until 1943, when Dr. Rosenblueth moved to Mexico and Drs. Bauer and White left for service with the Armed Forces. Because of the accelerated schedule during the war years, tutorial instruction was abandoned.

After the war a new Committee for the Tutorial System (Dr. Landis, chairman, and Drs. Anfinsen, Bauer, Dempsey, and Hawn) studied the question of student research. The committee recommended that the tutorial system be reinstated and nominated Dr. Francis Moore as Tutor in Surgery, Dr. Joseph Ferrebee as Tutor in Medicine, and Dr. Claude Villee as Tutor in Preclinical Sciences. These appointments were made and the tutors began work in the fall of 1947. They decided that the system would best fulfill its aims if it operated with a minimum of formal rules. The application of each student for admission to tutorial status is considered individually. The only formal prerequisite is that he

be in the upper half of his class. The Administrative Board has ruled that no more than fifteen per cent of any class may be admitted to tutorial status, but this limit has not been approached in any year so far.

Drs. Ferrebee and Moore resigned in 1948 to accept other positions and were succeeded by Dr. Lewis Dexter, Tutor in Medicine, and Dr. Arnold Seligman, Tutor in Surgery. Dr. Roy Greep was added to the Tutorial Committee in 1949 to guide student research in the School of Dental Medicine. This summer Dr. Seligman was appointed Professor of Surgery at Johns Hopkins and has been replaced by Dr. Howard Frank.

At opening day exercises, the opportunities for research in the Medical School and the operation of the tutorial system are described to the members of the entering class. At that time each student is advised to concentrate on the regular class work during his first year to make sure that he can handle it easily before becoming involved in some research program. In the latter part of the first year a census is made to discover the research-minded members of the class. By individual interviews the tutor learns what previous research experience the student may have had and what aspect of preclinical or clinical investigation appeals to him. A program of reading, or possibly of laboratory work, is arranged for the following summer.

At the beginning of the second year, those students who are in the upper half of the class, and who have indicated an interest in research, are invited to participate in a series of weekly seminars. In these, each student has an opportunity to present to his peers what he has done and what he would like to do in research. After he has presented the back-



ground of his research problem, the group discusses other possible methods of attacking the problem, additional experiments, other control observations that might be necessary, and alternative hypotheses to explain the data.

When a student has decided on a field of research, he has a conference with his tutor, who tries to find some member of the staff of the Medical School or one of the affiliated hospitals who would be willing to invite the student to be a member of his research group. Some students, of course, approach members of the Faculty directly. The tutors have made an earnest effort to distribute research-minded students among the many laboratories of the Medical School and not to concentrate them in their own laboratories.

In theory, students have two free afternoons a week in the second and third years. In this time they can do the necessary review of pertinent literature, learn whatever surgical or experimental techniques may be required, and perhaps perform some of the experiments. However, the number of voluntary clinics and courses, and the number of hours in the regular second-year curriculum have increased in the past six years and the opportunities for student research in the second and third years are now considerably less than they were previously.

Seminars continue throughout the second, third and fourth years. The third-year seminars were directed last year by Dr. Seligman and met bi-weekly. Some students presented progress reports, others had found that their original projects were not feasible and, having begun another one, discussed that. For the past few years the fourth-year group has voted to have evening meetings once a month. At these the student presents either a summary of his research or a more general review of the field. These seminars are attended by all the tutors. About 25 second-year, 15 third-year and 10 fourth-year students participated in these seminars in the past year.

In the fourth year a student may

apply for the privilege of substituting research for certain of the usually required clinical courses and in this way may get three to six months free to pursue his research problem. Members of the fourth-year class who avail themselves of this privilege are the only ones who are "tutorial students" in the strict sense of the term. Guiding their research, however, is but a small part of the duties of the tutors. During the past seven years from two to eight students per year have elected to do full-time research in part of their fourth year. The class of 1953 had eight, the largest number so far. Four members of the class of 1954 were tutorial students, one in Medicine, one in Nutrition, and two in Biological Chemistry. Four members of the class of 1955 are currently doing tutorial research, two in Pharmacology, one in Physiology, and one in Immunology. Many other students wish to take advantage of the elective courses offered in the fourth year and take only one or two months of research with some staff member. This is not formal tutorial work since the student does not substitute it for one of his required clinical courses.

At the present time there is no dearth of student interest in research, or of Faculty assistance in providing space, equipment, and guidance. One factor inhibiting student research is the slow but steady increase in the demands of the regular curriculum on the students' time and the consequent decrease in the free time available for research. As a result, students must do more of their experimental work during the summer and during the fourth year. If a student spends his summers doing research, he is deprived of an opportunity to earn money and may suffer financial hardship. A few students are able to find paid research jobs. A student may have to make the difficult choice between doing research in which he is not particularly interested for the sake of the salary attached, or of following his own research interests without being paid. There are a number of laboratories in the Medical School that would be pleased to

accept students for summer research but have no funds with which to pay them a stipend. Summer research scholarships would be extremely valuable and a start has been made in establishing them. The National Foundation for Infantile Paralysis has made one such scholarship available for the past three summers. Aids for Cancer Research, a Boston Women's Club, provided funds for two scholarships in 1953 and the Lederle Corporation gave the Medical School a grant to support two fellows in 1954. More such scholarships are needed.

The tutors also serve as the Committee on Honors in a Special Field, a subcommittee of the Committee on Examinations. Any student, whether or not he is a tutorial student, may submit a thesis based on his research to this Committee. If it is approved, the applicant is given an oral examination covering both the thesis itself and the general field with which the thesis is concerned. The Committee invites one or more members of the Faculty to read the thesis and to act as special examiners at the oral examination. Some of these theses are well up to the standard of Ph.D. theses. On the basis of the thesis and his general knowledge of the field displayed in the oral examination, the student may be awarded an M.D. *cum laude*, *magna cum laude*, or *summa cum laude* in a Special Field. These student theses are usually the result of research carried on as part of the tutorial system, but this is not a prerequisite and many theses stem from research done independently. Not all tutorial research, of course, results in an acceptable thesis.

In summary, the efforts of the tutors are directed toward:

1. stimulating and encouraging student research by means of seminars and individual conferences;
2. acting as a clearing house for information about student research and research opportunities;
3. providing a means of contact between students and investigators working in the same field; and
4. directing the program of each student who does three or more months of research in his fourth year.

# *Why Has 100 Per Cent of the Class of 1933 Contributed to the Alumni Fund?*

*J. Englebert Dunphy, '33*

Annual giving was established as the *modus operandi* of the Harvard Medical Alumni Fund in the fall of 1951. Between then and now, every single member of the Class of 1933 has contributed to it, a representation during this period of 100 per cent. To be sure, '33 as yet has not had 100 per cent participation in any single year. In 1951-52, only 30 per cent of '33 contributed. Disturbed by this relatively poor showing by a prominent class, a direct and personalized appeal was made during the following year—95 per cent of the class responded. Last year 97 per cent contributed.

I have been repeatedly asked what secret approach led to this phenomenal response. The Class of '33 was unusually well-knit; it was also rather troublesome—some of the escapades of its members are best forgotten! It has been implied that I have threatened to expose any of my classmates who failed to respond to our appeal. Although I cannot say that I might not stoop to blackmail on behalf of the Harvard Medical School, this has fortunately not yet been necessary!

Another explanation for the 100 per cent participation of the Class of '33 has been given to me by a well known medical educator, a former dean of another medical school. When I told him that 100 per cent of the Class of '33 had contributed to the Alumni Fund, he remarked, "The reason is obvious. There are no STINKERS in that class!"

STINKER is a good word. It seems especially applicable to the individual who finds countless reasons to avoid giving to an inescapably essential cause. He refuses to give, not because he can't afford it nor because he doesn't believe in it, but simply because he is a STINKER. It is my conviction that there are no STINKERS in the Harvard Medical Alumni Association and that the progressively rapid growth of participation of all classes in the Fund will prove it.

As a matter of fact, the record of the Class of '33 is the normal response to a personalized approach made on the basis of a clear and straightforward statement of the

facts. I do not think it will remain unique. I am sure the pattern will become widespread in a few years. Already more than 20 per cent of all classes have experienced over 75 per cent participation in the Fund, and about 30 per cent of all classes have had over 65 per cent representation. Moreover, '33 stands seventh in total amount contributed by any class in 1953-54, being surpassed by '28, '29, '30, '32, '34 and '40.

To contribute annually to the Harvard Medical School is becoming a habit for more and more of the Alumni. A fortunate habit indeed! The total \$371,000 that the Alumni have given during the last three years has been the critical factor in keeping the School on its feet and running in the forefront of medical education.

An account of the financial status of American medical education in general and at the Harvard Medical School in particular will be presented to the Alumni at a later date by Dean Berry. A few observations are sufficient at present to indicate the magnitude of the financial problem confronting the School and the nation.

When the Class of '33 graduated from the Medical School, the speakeasy was becoming respectable in the guise of the "Mayfair Club" and "Waterfront Club." That was the year the noble experiment ended. The New Deal was well underway. Tuition at the Medical School was \$400. An instructor receiving \$2400 lived comfortably. A professorship at \$10,000 was attractive financially as well as professionally. Staffing Vanderbilt Hall was comparatively inexpensive. In fact, the dining room was graced by numerous attractive waitresses. Vanderbilt was one of the better places to eat in Boston! Income from endowment and tuition provided that year approximately \$900,000 for the Medical School. The total operating costs of the School were in the range of \$1,200,000.

Today, there are no waitresses in Vanderbilt Hall. The cost of maintaining that building without luxuries now approximates \$125,000. The salaries of janitors, cleaning women and skilled laborers have trebled. This



is good. The salary of an instructor, however, has barely doubled, and that of a professor has been increased by even less. This is bad. Tuition is now \$1,000 a year, but it pays proportionately less of the cost of teaching a medical student today than the \$400 did in 1933. The endowment of the School has increased by more than \$6,000,000, but the operating cost of the School can no longer be met by income from tuition and endowment alone. Thus inflation has washed out the purchasing power of the School's dollars faster than the School has been able to build its assets.

The annual Alumni contribution of over \$100,000 represents the income of an additional endowment of at least \$2,000,000. At the present writing, it is the margin keeping the Medical School, like Alice in *Alice in Wonderland*, from losing ground even though running hard. But like Alice, if the School is to go places, it must run even faster.

It is essential that we keep the Harvard Medical School in the lead. That it has been maintaining this position is obviously of interest to the Alumni. Here are some significant facts. The Admission Committee has been faced in recent years with the difficult task of selecting 130 men and women from 1300 to 1400 applicants who knock annually at its doors. Although there has been a great decrease nationally in the number and quality of those hoping to study medicine, this decrease has not been felt at the Harvard Medical School. The quality of its pool of applicants is as high as ever. It is unexcelled in America or anywhere else.

Every individual accepted at Harvard would be accepted at any of the first-rate medical schools if he had applied. Indeed, of every dozen applicants, Harvard is able to accept but one, ten go to some other medical school, and only one fails to enter professional study. Thus, as Dean Berry puts it, the task of the Admissions Committee is not that of separating sheep from goats, but rather that of selecting the whitest sheep among a lot of white sheep. There are very few goats.

Many examples of Harvard's top position in the medical world could be cited. Here's one: Two of the first three Established Investigatorships of the American Heart Association were awarded to members of the Harvard Faculty of Medicine. The recipients have chosen to carry on their activities at the Medical School. It is significant that about a tenth of all the full-time teachers in our medical schools received their professional education at Harvard. One occasionally hears about Alumni who worry that there is perhaps too much research and too little teaching at Harvard. None of them will decry the fact that in two successive years the Nobel Prize in Medicine has been awarded to members of the Harvard Faculty of Medicine! To give the facts in full, it should be remembered that Harvard has had twelve Nobel Prize winners, six of them coming from the Medical School.

We are in an era of change in medical education, and the imaginative but conservative exploration of the integrated teaching of the Medical Sciences being done at the Medical School will interest all Alumni. So will new efforts to improve clinical teaching. Detailed reports will be published in future issues of the *Bulletin*.

Finally, when one is asked to contribute to the Medical School, one naturally wants to know what the School has been doing to help itself. It is highly significant, for example, that in the last five years the endowment capital of the School has been increased by \$2,500,000. The equivalent of three new professorships has been established, freeing funds for paying other teaching salaries. An extensive rebuilding of the laboratories for Pathology has been completed and the Department has been revitalized. This was described in the April issue of the *Bulletin*. Last summer, Vanderbilt Hall was completely renovated. Further rebuilding is currently progressing rapidly in Building D. Two new floors of laboratories have been made available for Bacteriology and Immunology.

There can be no doubt that the School is a going concern under the leadership of Dr. George P. Berry, but there is a difference between real and continuing progress and merely maintaining the status quo. Mobility in planning, freedom for judicious experimentation in educational methods and top-flight teaching will require in the foreseeable future that the Alumni continue and increase their generous annual giving of unrestricted funds.

Our goal should be a quarter of a million dollars annually for the Medical School. If every graduate would do as much as has each member of the Class of 1933, this goal would become a reality. Every doctor, every citizen today, has definite and important charitable obligations. He is asked to contribute to his Community Fund, to his local Red Cross, to his Church, to his hospital, to his college, to his medical school—to many other worthy causes. Just where an Alumnus will place the Medical School in this group must be an individual decision, but clearly the School must rank high. The emotional appeal for funds for research in cancer, heart, polio, muscular dystrophy, for hospital construction, and so on *ad infinitum* is less compelling to the physician who realizes that these important projects can go forward only when there are enough well-trained doctors and scientists to pursue them. As the Dean has repeatedly put it, these projects are "the golden eggs"; the Medical School is the "goose" that lays them. Only doctors are in a position to realize how vital it is that the goose be well nourished. Grabbing for the golden eggs alone will lead to disaster. The Medical School is the wellspring. It must be supported.

These are among the reasons why 100 per cent of the Class of 1933 has contributed to the Harvard Medical Alumni Fund.



# *Aesculapius Inspects the Harvard Medical School*

*Frederick C. Irving, '10*

WILLIAM LAMBERT RICHARDSON  
PROFESSOR OF OBSTETRICS EMERITUS



*" . . . a bearded man clad in the flowing  
robes of ancient Greece. . . . "*

Early one morning last spring I stood on the roof of the Boston Lying-in Hospital enjoying the fresh air and watching the sun rise. Behind the downtown buildings the horizon had paled; already it was light enough for me to distinguish things about me. No noises arose from the streets below; there were no sounds of traffic to break the silence of the early day. I heard someone moving behind me, and turning quickly I saw a figure emerging from behind the penthouse of an elevator. It was that of a bearded man clad in the flowing robes of ancient Greece, who held before him planted firmly on the roof a long staff about which a serpent was entwined.

My first startled thought was, "Here is another of those refugee doctors." Since the end of the war, and even before, they had over-run the hospital; in some way this one must have escaped the vigilance of the house staff and made his way to the roof. Unusual costumes were nothing new; we had entertained East Indian women doctors in *saris* and sandals, Chinese women doctors in high-necked silk blouses, Hungarians of both sexes in high boots, and South American males in lavender zoot suits. I had never seen, however, any one attired in the fashion of twenty-five centuries ago.

The apparition spoke: "I am Aesculapius, son of Apollo. I am the god of medicine."

Thinking that some friends of mine, who possess in an exaggerated form what passes for a sense of humor, were playing a trick upon me, I was about to introduce myself in turn as James Bryant Conant. Luckily, how-



*"... a group of virgins . . . to strew sprays of myrtle and garlands of bays before the advance"*

ever, I paused to inspect my visitor more closely. Although his beard was gray, his countenance displayed the bright hue of youth, and upon his brow there rested an air of supreme and natural dignity. A faint aura played about him, making him clearly visible in the obscurity of early dawn. "Here is something," I said to myself, "that transcends the earthly."

Apparently he could read my thoughts, for he continued: "Doubt not; the gods are immortal. Either they exist today, or they never have existed."

There was logic in this; also it was as plain as a pike-staff that I was not dreaming, for to my right was Vanderbilt Hall and before me was the gray bulk of the medical school. A few yelps from the Angell Memorial Hospital added a further evidence of actuality. If these things were real, so was Aesculapius, and if Aesculapius was real those jolly old tales of Europa and the bull and the rape of Proserpina must be true, and all kinds of interesting things might happen at any time. I could

imagine Mrs. Arlington Berkeley of Commonwealth Avenue, like Leda, being gotten with child by Zeus in the form of a Public Garden swan. I could picture leering satyrs in Louisburg Square hiding behind the trees and statues and lying in wait to deflower the venerable virgins of Beacon Hill as they emerged in the evening to water their dogs. What a place to live in Boston was going to be from now on!

"I am sent hither," continued Aesculapius, who by now had apparently sensed my conviction, "by my father Apollo, the physician to the gods—he has strictly a Back Bay practice—to inspect the medical schools of America. With my daughters, Hygeia and Panacea, I arrived a week ago in the chariot of the sun. We have stopped first at Harvard because of all American universities its distance from Mount Olympus is the shortest in a straight line. Harvard, I understand, believes this span to be even shorter intellectually than geographically and maintains the real point to be, not how far Harvard





feet of the professor . . .

is from Olympus, but how far Olympus is from Harvard.

"I am told, moreover, that there exists at Harvard a group of doctors which calls itself the Aesculapian Club and has for its object the veneration of my name. Word has come to me also that once in the midwinter and again in the springtime these votives of mine hold a feast with appropriate rituals and ceremonies as becomes the worship of a god, and that at the spring feast they perform a play in further celebration of my divinity."

"That is true, Aesculapius," I replied.

"This play, I trust, is not a ribald, bawdy, and licentious comedy after the fashion of Aristophanes?"

"The plays which I have seen," I answered, "convince me that your worshippers in Boston would consider Aristophanes a prude. Moreover, I fear that as the evening wears on many of them are apt to transfer their allegiance to Bacchus."

"A notable tosspot and a low fellow," he said, "but I must confess that his potations add much to the gaiety

of life; also, they are not without a certain therapeutic value, for they relax the peripheral arterioles.

"My daughter Hygeia," he went on, "has been busy at the Harvard School of Public Health, helping with the latest of its periodic reorganizations. My other daughter, Panacea, she who can cure all ills, has spent her entire time in the department of pharmacology in your medical school. She has introduced there what appears to be a new and startling concept; namely, the treatment of diseases by the use of medicines. Although such an idea is against all traditions of the department, she has been treated with tolerant courtesy. So far, however, she reports no converts.

"We are awaiting the same car of Phoebus which brought us. Shortly it will appear on the eastern horizon and, after it has gathered me up here and my daughters who are waiting on the roof of Building A, we shall be on our way.

"I myself," he continued, "by becoming invisible, as is the prerogative of a god, have been able to attend unseen lectures, recitations, and laboratory exercises in your medical school. As regards your teachers, I am of the opinion that Demosthenes need not fear for his laurels as an elocutionist. Still invisible, I have also devoted considerable attention to your administrative department. Ordinarily, because of my divine origin, all secrets are revealed to me and I can read the thoughts which lie behind the eyes of mortals; moreover, the most intricate details of the Eleusinian mysteries are as elementary to me as the alphabet; but, my friend, I tell you frankly"—and his voice betrayed a note of frustration—"after many hours spent in the dean's office, I still have no clear idea of what goes on there. Presiding over its portal, however, is a minor goddess by the name of Murphy who seems to know her business."

"What has impressed you most during your visit?" I asked.

"The most striking incident I encountered," he replied, "was not at Harvard Medical School at all, but in one of the general hospitals affiliated with it. It concerns, a solemn ceremony known as 'medical grand rounds.' Let me describe it exactly as it happened. Preceded by nurses dressed like priestesses in snowy white, the long procession starts down the aisle between the beds. Although the *cortège*, as you shall see, is not lacking in impressiveness and dignity, in ancient Greece we would have added certain touches and embellishments; for instance, in addition to the priestesses we would have provided a group of virgins in the vanguard whose duty it would be to tread a stately measure and to strew sprays of myrtle and garlands of bays before the advancing feet of the professor. Accompanying them would be youths in leopard skins, playing upon the pipes and timbrels, and



over all would be heard the soft notes of the lyre. I offer these suggestions in no spirit of criticism but in the hope that the professor, who through a sense of modesty may have omitted them, or who more likely did not happen to think of them, might deem them artistic additions to the pageant.

"But to return to the procession as I saw it. After the priestesses comes the high priest, or resident, also clothed in white. Serried ranks of fountain pens containing inks of varied hues and rows of colored lead pencils fill one breast pocket of his coat, and in the other are a bevy of throat sticks. In his side pockets are a little rubber-headed hammer, an ophthalmoscope, a tuning fork, and a stethoscope. This I understand is standard field equipment for a medical resident. Next comes the professor, moving majestically. Behind him are neophytes and familiars bearing records, charts, electrocardiograms, x-rays, and the other *impedimenta* of scientific medicine. In the wake are other neophytes and familiars, students, visiting doctors of American descent, visiting doctors of alien descent, nurses, dieticians, orderlies, social service workers, ward maids, villagers, and peasants.

"The patients gaze apprehensively at the advancing procession; in their eyes one sees the look that marks the stricken doe. Every body cavity of theirs closed or open, including those which open only on occasions, has been explored with needles, catheters, or rubber tubes of assorted lengths and calibers, and the contents thus obtained has been subjected to the most searching scientific analysis. These patients have no secrets from the doctors; indeed, they even have no reticences.

"The professor pauses by a patient's bedside, the *cor-tège* halts, and the resident begins to intone his description of the case. Fact follows fact, scientific datum follows scientific datum, all delivered in the mysterious jargon of erudite medicine. At length he pauses. So far no one has asked the patient what is the matter with him or how he feels.

"A heavy silence falls. The professor regards the patient broodingly. At length he turns to the resident.

"'Doctor,' he says, 'what is the blood phosphate?'"

"'It is normal, sir.'"

"'And the phosphatase?'"

"'Within normal limits.'"

"Another pause; then:

"'How about the Van den Bergh?'"

"'The direct or the indirect?'"

"'Both.'"

"'Both normal, sir.'"

"'How is the gold sol?'"

"'Normal.'"

"'And the Bi-sod-al?'"

"'I beg your pardon, sir?'"

"'The Bi-sod-al?'"

"'I'm sorry, sir, I neglected to have it done.'"

"'And have you also neglected to determine the Ortho-gynol?'"

"Confusedly the resident admits this error also.

"'Doctor,' the professor demands with studied patience, 'may I be permitted to inquire if you have deemed it necessary to have any endocrine studies made?'"

"'Yes, sir, I have.'"

"'And what do they show?'"

"'The pregnandiole, the gonadatropic hormone, and the estrogens, including the estrone, the estriole, and the estradiol are all abnormally high for a man.'"

"The professor gazes out of the window deep in thought. It is a bright, sunny morning; little clouds drift across the sky and the trees sway gently in the breeze. A pigeon flutters down to alight on the windowsill; he looks in, defecates hastily and is off again. Moments pass; all eyes are fixed expectantly on the great man; all ears are strained to catch his first word. He is thinking; and so quiet is it that the assembled company can just detect the faint rumble of mental peristalsis. At length he speaks.

"'Gentlemen,' he says as he turns to his *entourage*, 'I have a humiliating confession to make. To so high a point has scientific investigation been carried in this hospital that it has become unnecessary to take a patient's history, but here we are faced with a situation which can be solved in no other way. I beg your indulgence, therefore, while I ask the patient two questions, but only two.

"'Mr. Brown,' he says, 'do you undress in the dark?'"

"'Yes, sir.'"

"'Mr. Brown, do you sit down to urinate?'"

"'Yes, sir, I do.'"

"'Doctor,' says the professor, turning to the resident, 'have this man transferred to the gynecological service for a hysterectomy.'"

By this time it had grown lighter. "I have not much longer to stay," said Aesculapius, "and in what time remains I wish to ask some questions about Harvard Medical School to which I lack the answers. Will you supply them?"

"If I can, Aesculapius."

"I find your students well trained in the science of medicine, but I also find them poorly instructed in physical examination and even in ordinary observation; nor can I discover that they have been taught anything about those practical factors—call them social, philosophic, humanistic, or what you will—which are so necessary to make a man a good doctor; in my opinion they know no more about the use and dosages of drugs than does the fetus nestling in its mother's womb, yet I tell you without flattery that there are no better practicing physicians than Harvard graduates. How do you account for it?"

"They learn those things in the hospitals where later they serve as interns and residents."

"Then I think," said Aesculapius, "that it should be the hospitals which confer upon them their degrees of doctors of medicine."

"There are many who agree with you."

"I realize," continued he, "that once a student embarks upon the pursuit of medicine he enters the most exacting novitiate there is—one which admits no opportunity for the further development of general culture. I therefore ask you if, realizing this, the Harvard Medical School requires that its matriculates be versed in such studies as literature—both classic and modern—history, philosophy, and the fine arts, for these form the background for every educated man?"

"By no means, Aesculapius. Harvard Medical School—and in this it differs not at all from others—requires that every student who enters should have devoted in college the equivalent of one year to biology, chemistry, and physics; hence if his college course lasted four years he would have spent one year or one-quarter in science; if three years, one-third; and if, as was frequently the case during the war, two years, one-half. If you add to this required year the extra and unnecessary science courses urged upon unsuspecting students as a further preparation for medicine by their uninformed deans, you can understand why so many young men come to medical school today with practically no general education, although the kind of citizens and even the kind of doctors they may be is governed more by their cultural background than by anything they may learn in the laboratories. If a student who applies for admission to a medical school is familiar with pre-Socratic philosophy, or if he can read Horace, Dante, or Montaigne in the original, or if he understands how the introduction of perspective and the illusion of distance altered the course of Italian painting, he had best be quiet about it lest the authorities suspect that while prowling about in the enthralling storehouse of the past he has stolen too much time from his scientific studies."

"This is indeed a great pity," said Aesculapius, "for when your students go out into the world to practice they will encounter among their patients and other laymen a number of people of intelligence and education; all their time will not be spent with other doctors."

He gazed reflectively at the medical school, whose windows were now gilded by the first rays of the sun.

"A stately pile," he said, "and larger than my temple at Epidaurus; yet Hippocrates, the greatest physician of all time, taught under a plane tree on the tiny island of Cos, and his influence has pervaded medicine even to this day."

"Most of what you see is taken up by laboratories," I explained.

"Laboratories," he reflected, "tell me something of scientific medicine and of those who teach it. I have heard that all professors in your school are now what is known as 'full-time' men; not quite demigods, as I understand it, but distinctly above the rank of mortals. Being full-time, do they spend both day and night in teaching and in the care of the sick?"

"By no means, Aesculapius. On weekday mornings

they reach their offices at 9 o'clock, or thereabouts, and leave at 5, or thereabouts. On Saturdays they leave at 1, or thereabouts. They have vacations every summer from early June to October and they have a recess at Christmas and in the spring. They do not work on Sundays, nor on national or local holidays. So far, however, they do not observe saints' days."

"And yet they are called full-time?"

"Yes, Aesculapius."

"During my short stay in your city," he continued, "I have overheard certain phrases in the vernacular which have excited my interest. Would it be correct to say that these full-time professors were riding the gravy train?"

"You have put it pithily. But on the other hand there are certain drawbacks to a full-time career. In most medical schools all teachers are underpaid, and Harvard is no exception. But more important still, oddly enough, is the sacrifice of personal liberty. If a full-time teacher for any reason should wish to withdraw from the medical school or from his hospital and enter private work, he would find that few if any patients would come to him, for he had never developed a private practice. The instinct of self-preservation is strong among the laity, and when they are sick they prefer to be taken care of by doctors rather than by professors. The full-time man, therefore, always has his head in the academic noose."

"What you have said about these individuals interests me greatly," said Aesculapius. "Will you be good enough to tell me how professors are appointed at Harvard Medical School?"

"With pleasure. I have served on several committees designated for that purpose and I assure you that aside from the goings-on in *Alice in Wonderland* I have never encountered elsewhere anything which resembles their actions. To begin with, no one who knows anything about the subject under discussion is eligible for membership; that might result in a prompt and efficient decision, which would be against all precedent. Let us suppose, for example, that a new chair of comparative proctology is to be filled. A group of heterogeneous professors is selected, their chief qualification being that the anatomical knowledge of each must stop at the sigmoid flexure. The committee first compiles a list of candidates obtained from the catalogues of other medical schools, from correspondence with doctors in other cities, and from the rosters of so-called learned societies. When at length they become desperate for a likely person I have even heard the use of a ouija board suggested. The next step is the preparation of a bibliography for each candidate. An impressive bibliography is one containing a great many titles and covering numerous mimeographed pages. The more crafty and suspicious members of the committee then eliminate all reviews of the literature and addresses to graduating nurses, which often reduces the bulk considerably. But do not underestimate the power of a bibliography; the



committee regards a candidate with a long list of published articles as a scholarly scientist, just as the Iroquois Indians regarded a warrior with a large number of scalps hanging at his belt as a *Heap Big Chief*, but in the case of the Indians there was far more reason."

"I suppose," said Aesculapius, "that the committee reads all the articles in the bibliographies?"

"Not all; most of the members stand on their constitutional right which forbids the infliction of cruel and unusual punishments. But to continue: At this point two *clichés* begin to be bandied about. These are that a candidate must be 'exciting' and that he must be interested in the comparative proctology of the future. Just what the committee means by exciting is not clear; one may imagine a person as exciting enthusiasm, apathy, or revulsion. At about this time also some member is always ready to upset tradition and to jump the gun by proposing a definite candidate, which he does in somewhat this fashion:

"I believe that Meyer Feitelbaum of Texas Christian is just the man. He knows all about the lower bowel in the higher apes, the lower apes, and the apes; also in the vertebrates and the invertebrates; if amoebae had intestinal tracts he would undoubtedly know all about their lower bowels. In fact, he is more than a comparative proctologist; he is a superlative proctologist."

"But will he develop the comparative proctology of the future?"

"If his ideas are successful proctology will have no future. He is now working on a project which by the use of predigested foods, vitamins, and the extensive employment of parenteral feeding will in time do away with the necessity for the lower bowel. It will then become a vestigial organ; and man will at length enjoy the advantage possessed so far only by the American wildcat. Absence of the lower bowel will remove the necessity of going to the bathroom; think of the millions of man-hours that will be saved every morning in Massachusetts alone."

"Here another member of the committee breaks in hesitantly.

"I dislike to bring this up, but I believe we should face the facts. Is this man Feitelbaum by any chance an M.D.?"

"Fortunately no. He is a Ph.D.' Whereupon everyone sighs with relief."

"And what, pray, is a Ph.D.?" Aesculapius interrupted my narrative to ask.

"A doctor of philosophy."

"Is he a doctor or is he a philosopher?"

"He certainly is not a doctor, neither is he a philosopher. He is one who spends three years in the study of some esoteric problem which has escaped—some say is beneath—the notice of the average individual. Then he writes a thesis."

"Not a very broad training," remarked Aesculapius.

"You are, I fear, a reactionary. In modern medical

schools a Ph.D. is regarded as a scientist and a scholar, while an M.D. is just another doctor. But perhaps you would like to hear the titles of some theses written in recent years by candidates for this degree in Harvard University?"

"I should indeed."

"One was called 'The Regeneration of the Head Segment in the Earthworm.' It appears that the earthworm as he burrows his way through the soil wears out his front end, and this thesis explains how he renews it."

"Who cares?" said Aesculapius.

Unrebuffed I continued, "Another was written on 'The Biology of Midgets.' This is very important if you are interested in midgets."

"It would be even more important if you were a midget," replied Aesculapius. "All this reminds me of a line from your Oliver Goldsmith: 'These little things are great to little men.'"

"That, Aesculapius, has all the earmarks of a nasty remark."

"Maybe so, but as a class I have found scientists to be technologically capable and socially dull; but if we must have them, let us train them carefully for their work just as Plato planned for the education of rulers in his ideal state. Let us segregate them for this purpose from the cradle, and bring them up in sequestered surroundings, thoroughly indoctrinated in all the branches of science. Since a constant supply of such bright young men will be needed in future generations, let us procure them by breeding with young women of the highest intellect, handmaidens of Pallas Athene; but let us accomplish this by artificial insemination, so that our scientific youths will be spared the distraction and annoyance of sexual intercourse. But I digress: what happened to Feitelbaum?"

"Oh, about the time he seemed certain of selection as the professor of comparative proctology, the wealthy benefactor who had promised to endow the chair recovered from his strangulated hemorrhoids and was no longer interested."

"But if it had been otherwise would the committee's decision have been final?"

"Not at all. It would have required the approval of all the professors, and of the President and Fellows, with the consent of the Overseers."

"Who are the Fellows?"

"Oh, just fellows."

"And the Overseers?"

"They overlook things."

"Then I judge that the President really makes the decisions?"

"He does indeed."

"And does he also decide who shall be professors in Harvard College, the Law School, the Divinity School, the Schools of Dental Medicine and of Public Health, the Graduate Schools of Arts and Sciences, Engineering, Education, and Business Administration, as well as in

the Gray Herbarium, the Bussey Institution, the Arnold Arboretum, the Blue Hill Meteorological Observatory, and the Harvard Forest?"

"In effect he does."

"Is he a god?" Aesculapius inquired in a tone of awe.

There was a pause. I saw that I must choose my words carefully, for I was then still working for the university.

"That," I replied cautiously, "depends upon whose opinion you accept."

The light in the east was now intensely bright and steadily growing stronger.

"Just a question or two before I go. What are some of the great discoveries made in your medical school?"

"Well, there is ether."

"But I thought a doctor in a small southern town—"

I held my finger to my lips.

"Yes, I know; the Massachusetts General Hospital. What else?"

"Well, there is appendicitis."

"But what in recent years?"

"The operation of splanchnicectomy to relieve high blood pressure, the fractionization of plasma, the use of liver in pernicious anemia—"

"Ah, there is something. It would not surprise me if that were what is wrong with Aphrodite. I must persuade Apollo to try some on her as soon as I return to Olympus. Vulcan, the old quack, has been feeding her iron filings thinking that her pallor was due to premenopausal bleeding.

"I see by the newspapers," he continued, "that scarcely a week goes by but what some child is rushed to The Children's Hospital, usually by airplane, in a most perilous condition. There are babies with upside down stomachs and those whose stomachs are inside out;

there are blue babies, yellow babies, and green babies; and there are older children who have swallowed safety pins, and in fact toilet articles up to the size of a hair brush. I know how distasteful such publicity must be to The Children's Hospital and how mortifying it must be to its staff, but I suppose that in spite of all attempts to the contrary the news just leaks out."

"Yes," I replied, "it just leaks out."

"Let me ask you this," he resumed, "can any of your doctors at Harvard Medical School raise the dead?"

"Even the surgeons," I replied, "who always take a happy view of their own ability and seldom operate without saving the patient's life, would not claim that."

"I can," announced Aesculapius, "and I could do it when I was still a mortal. As a matter of fact I was so good at resurrection that practically nobody went to Hell. This annoyed Pluto so much that he complained to Zeus, who slew me with his thunderbolt; and that is how I became a god."

The light in the east now had grown to terrific intensity and was moving toward us rapidly. I could hear the rushing of air, the rattling of trace-chains, and the panting of the celestial horses. Suddenly an unearthly brilliance blinded me, and the voice of Aesculapius came down as he was swept upward.

"So long, son, so long."

This address was originally delivered by Dr. Irving at the Mid-winter Dinner of the Aesculapian Club on January 11, 1947, and the text was published privately as a supplement to the *Aesculapian Bulletin*. Because of numerous requests for wider distribution, it is reprinted at this time with the kind permission of Dr. Irving and the Aesculapian Club.

We are indebted to Ernest Craige, '43A, for the illustrations, which are appearing here for the first time.





# Editorial

## A NEW LOOK AT H. M. S.

With this issue the *Bulletin* appears in new garb; larger, more easily read, and, we hope, more attractive. The format is improved, and the content will not lag. But to be bigger and better alone is not the only goal. The increased size enhances the flexibility of the makeup; allows opportunity to present material in a more interesting and readable fashion. This all sounds more expensive. Actually it costs less. By taking advantage of pre-existing facilities for type and for paper of this size, money is being saved. The larger size has brought increased advertising revenue. We do not intend to compete with the trade journals, but money saved for the Medical School in this fashion already amounts to more than half the year's tuition for a medical student, to part of an instructor's salary. These are data more significant than dollars and cents.

Even in the academic world, however, these savings are not secured without the expenditure of some commodity. In this case the commodity is time and enthusiasm. Alumni have in the past and are continuing to contribute in this fashion to the *Bulletin*. Many of them have made possible the present issue. Among the non-Alumni who have added as well their special skills to the creation of the new format we must here express deep gratitude to Mrs. Peter Mollman, Mr. Charles Grassinger, Mr. Peter Pratt, and Mr. Richard Flewelling.

Time is at a premium for many of us. Enthusiasm flags when demands for further effort as authors, editors or committee members are endlessly repeated in the name of good causes. Financial sacrifice is difficult too, and one occasionally feels with Yeats that, "The fascination of what's difficult has dried the sap out of my veins and rent spontaneous joy and natural content out of my heart." The poet was fed up. We have been, too.

Why then should we continue to draw upon our stores of good will for the Medical School in the expenditure of further time or money for Harvard? A few reasons are presented in an accompanying article by Dr. Dunphy. In future issues Dean Berry will present some precise and sobering facts about the financial condition of the Medical School. These facts are not uniquely pertinent to Harvard, but are typical of the problems of the Medical School today. What is, however, unique to Harvard's situation is what the Medical School is doing to deserve the

support of its Alumni in the solution of these problems. We no longer have waitresses in Vanderbilt Hall, but in the past two years we have added three Nobel Laureates. While increases in the salaries of our instructors have not kept pace with those of our janitors and cleaning women, one tenth of all the full-time teachers in our medical schools received their professional education at Harvard. Twice as many as from any other single medical school. Chauvinism? Perhaps. But these are facts which must be considered by one contemplating the investment of time or money in the future of the Medical School.

The purpose of the *Alumni Bulletin* is not to raise funds. What it should more correctly do is to raise enthusiasm and interest in the Medical School and its operation by the dissemination of information and opinions in as attractive and provoking form as possible. One such vital piece of information concerns the financial condition of the Medical School. What are the facts? Where do we stand? What about endowment income? Why do we need support from Alumni contributions? These are facts that can and should be presented by the *Bulletin*. If they are not as pleasant as the news that our classmates' families are enlarging, they are at least as stimulating.

What the Medical School is doing to deserve the support of its Alumni is also news. It is important to those who concern themselves with the future of schools like Harvard, and it is of interest to those who pride themselves on the quality of their medical education. A going concern, however, needs more than interest. It needs capital. A school whose contributions to medicine continue, as have ours, is a sound investment for alumni capital. Because funds from this source are unrestricted, they are of particular importance.

Cognisance of these problems is a step toward their solution. To highlight them is a function well served by the *Bulletin*. Many alumni are not aware of the magnitude of the problems faced by Harvard, but once made aware they may help in many ways. Individual donations are perhaps the most important, but by no means the only way.

Elsewhere in this issue, for example, announcement is made of the endowment of a professorship in medicine by a patient and friend of Dr. Samuel A. Levine, '14. This is an important addition to the teaching capacity of the Medical School. In the words of Dr. Levine, "This is the reflection of what private enterprise could do to salvage the whole system of independent intellectual institutions of this country." It is also the reflection of what a loyal Alumnus and physician can do in drawing the attention of men who are capable of such generosities to the needs of these institutions.

To make us aware of the problem is a prime responsibility of the articles published in this and subsequent issues of the *Bulletin*. To do something about it, whether by the expenditure of time, effort, or money is the responsibility of the individual.

J. P. M.



# *De Mortem Dictu*

*Albert Salisbury Hyman, '18*

By way of explanation: For more than a quarter of a century I had a summer home on Long Island Sound at Fairfield, Connecticut. A summer home can serve two useful purposes; it may provide, one hopes, a happy background for relaxation and release from a New York practice and it also provides store-room space for the accumulation of considerable more or less useless material gathered over the years and set aside for a leisurely inspection on some future day which, sad to say, never arrives. The crisis comes when such a home is finally a problem of disposal; the furniture and sundry appurtenances are moved with a minimum of discomfort. But what to do about a shed full of crates and boxes? How does one handle the pile on pile of books, magazines, medical journals, office records of deceased patients, X-ray films, reprints of original papers written years ago and optimistically purchased in 1,000 lots because the publishers offered them at bargain rates compared to the cost of 100 (which actually was the number really needed)? In short, how does the aging physician meet the perennial distaff complaint that the stuff should have been thrown out years ago and not left to clutter up what was once to be an extra garage for guest cars? . . . The movers had finally reached the furthest corner of the shed and a World War I foot locker came to light; the cover was broken and a paper box fell out as the locker was hoisted up onto the truck. I picked it up; it was marked "H.M.S.—Boston City Hospital, 1918." Among a number of nostalgic mementos was a hand written manuscript; on the first page was a notation: "Submitted for the Dean Edward H. Bradford Prize concerning my experience as an in-

tern." The paper was never "submitted," I was tapped on the shoulder a few days later by the U. S. Army Medical Corps. As I stood by the impatient movers reading the faded manuscript, I was struck by the freshness of the story which, though written some 36 years ago, might have been composed by any one of my present intern staff. It brings up a historic medical situation which has never been completely settled. It will also bring back to every physician who may read it the unforgettable memory of his first contact with LEX MORTEM DICTU. This is the manuscript exactly as it was written in 1918.

My Experience as an Intern  
A. S. Hyman, M.D.  
Junior House Officer, First Surgical  
Service  
Boston City Hospital

My experience as an intern at Boston City Hospital started on the very first day of my service. I had left my last class at the Harvard Medical School at 10:30 a.m. and reported at the Superintendent's Office at the hospital about an hour later. I had won the appointment on the First Surgical Service, and I was sent directly to meet Dr. John Babst Blake, the Chief of the department. He very kindly introduced me to all of the members of the staff and then he gave me a brief talk about duties. As the youngest member I was assigned the task of writing the patients' histories and making the preliminary physical examination. I also was to do the necessary laboratory tests and prepare the patients for operation. My job included among other things the bringing of the patients to the operat-

ing room, standing by the etherizer, starting the ether for the next case, having charge of the recovery ward, changing dressings, removing casts, setting up fracture apparatus, taking patients down to the X-ray room for plates, making sure that these plates were in the operating room during the surgery, rolling plaster bandages, taking notes on the operation, bringing specimens over to the laboratory for diagnosis, getting this diagnosis onto the patients' charts, and posting the daily operation list. These were to be my day-time duties.

At night and Sundays I was to substitute for my next senior medical officer and should be thoroughly familiar with all of his duties. I was also to see all emergencies occurring at night on the service and to call the Senior only if in doubt. Patients admitted during the night should have a brief but complete history and physical examination made with whatever laboratory work was in my judgment indicated. Later in the day a more complete record was expected. When the patient was ready for discharge all progress notes must be up-to-date for the Senior to sign and to present to the Chief for his approval. Additional duties consisted in covering the Accident Room on alternate nights from 10 p.m. to 8 a.m.

Dr. Blake very patiently dictated these duties to me as I wrote them down in a new notebook which he said I should carry with me at all times. It was now about 12:30 o'clock and we all went down to the interns' dining room for dinner, which I enjoyed very much. Dr. Adams who was my Senior then took me for a tour of the wards and showed me where our patients were placed; due to overcrowding the patients of the

First Surgical Service were distributed on many wards and I made a list of them. At 4 p.m. Dr. Adams was called away and I was then on my own. I realized that my responsibilities were very great but I decided that I would carry out my duties to the best of my ability although I must confess that my heart was heavy when I thought of how much I had to learn. I vowed, however, that I would make no mistakes which would bring dishonor to the service.

I opened my notebook and saw that my first duties were concerned with the patients' charts, so I began to read these over at the nurse's desk. There were about 80 of these and I soon noted that most of them appeared to be incomplete insofar as history, physical examination, and report of the operation was concerned, and I started to plan a method of getting these up-to-date. At this moment the telephone rang and the nurse who answered it came over and said that I had better get over to new Ward K and pronounce a man dead as soon as possible or I would get into trouble. They had been looking for me all afternoon and where was I? After making a diagram of the best of several possible routes to new Ward K, I started out with much misgiving. There was nothing in all of the notes that I had taken that morning (and they covered about 15 pages) about the procedure to be followed in pronouncing a man dead. I thought that I had better stop off at the library and look up the subject but the young lady there said that she had nothing listed on this matter, but it probably was on file in the Superintendent's Office under *Lex Mortem Dictu*. At the office I found only an old man who was the messenger boy for the First Assistant; he said that he had worked there for many years but he couldn't remember just exactly how to pronounce a man dead, although he had seen it done many times. Maybe I should ask another intern or the nurse on the ward, who, he was sure, would be very happy to help me.



*"... all of the nurses ... appeared to be very angry ..."*

Unfortunately I met no other intern on my way to Ward K and when I finally entered the room all of the nurses were gathered near the entrance and they appeared to be very angry, so I changed my mind about asking them. They said that they had been waiting almost an hour for me to come over to pronounce the man dead and that they could not move the body until some doctor had pronounced the man dead, and furthermore they needed the bed for another patient. I could see that they were in no mood to answer my questions about the proper procedure in pronouncing a man dead, so I reluctantly made my way through an unfriendly group to the middle of the ward where a bed was screened. I entered the enclosure, which seemed to be crowded with nurses, orderlies, and a number of other people whom I could not identify at the

moment although they appeared to be rather official in bearing.

Finally I got to the head of the bed and slowly pulled down the sheet exposing a very thin emaciated man. He was unquestionably dead because the nurses said that they had been waiting for an hour but was that sufficient evidence? Had the usual tests of death been made? What were these tests of death and who had made them? I tried to conceal my confusion; I felt that I must not let all these onlookers see that I was an inexperienced doctor. I must make no mistake which would reflect on the honor of the Service. In a crisis like this, the Chief had said that one must proceed slowly and carefully.

I looked at the man with a close scrutiny and felt for his pulse; his skin was ice cold but I thought that I could just detect a faint and somewhat rapid pulse but then I realized



that I was holding his wrist so tightly that the pulsation was mine. I took out my stethoscope and listened intently to his chest but I could hear no sounds. I then opened his eyelids and noted that the pupils were unequally dilated. By this time there was considerable movement among the nurses and orderlies; I thought I detected an element of impatience and I overheard whispers about "hurry up and get the job done." I continued to examine the man, however, hoping against hope that someone would finally give me a clue in regard to the next step, but I could gather nothing constructive from the undertone comments which were being made. Something had to be done, so I finally straightened up and looked significantly at the head nurse, saying that she was correct and the man had undoubtedly expired.

She was quite indignant and exclaimed in a loud voice that everyone in the ward could hear, why didn't I go ahead and pronounce the man dead and stop all this nonsense? Just as I began to feel rather weak the thought occurred to me that the constant use of the word "pronounce" must definitely have some special significance; it must mean that something must be said and it must be said in a particular way. In the case of death there must be some legal phraseology which is used. In the back of my memory I dimly recalled a play which I had once seen in which a character had died and the attending doctor had made a public statement. I tried desperately to recall what he had said, and then suddenly I remembered certain words which at the moment seemed to cover the situation. With all of the dignity I could summon under these difficult circumstances, I moved slowly to the head of the bed and then solemnly made the following statement: "By virtue of the authority vested in me by the Commonwealth of Massachusetts and in accordance with the rules and regulations of the Health Department of the City of Boston, I, Dr. Hyman, a

duly authorized intern of the Boston City Hospital, do hereby and hereon officially pronounce this man dead, and in witness thereof I hereby and in the presence of these witnesses set my hand and signature."

I noted when I got through that there appeared to be a rather stunned silence among the whole group. The head nurse in particular seemed to be shocked and I was no little alarmed at her pallor when I asked for the certificate to be signed. She finally got some kind of a slip of paper from her desk which I quickly initialled and then I walked out of the ward. As I turned at the door I noted that no one had moved and everyone seemed to be standing like statues. The silence was oppressive.

On my way back to the main wards I again felt weak as I wondered how much of the ceremony I must have fouled up; from my last glance at the group around the dead man's bedside it was quite apparent that I must have done something quite contrary to the usual procedure. From a grumbling yet jocular throng everyone had become deeply serious and solemn after I had made the pronouncement. The more I reviewed the situation the more worried I became and I decided that I would ask the first house officer that I met how I was to get out of this mess which I had foolishly gotten into because of my stubbornness in not questioning the nurses before pronouncing the man dead. It was getting late and although I was in no mood for eating I went over to the dining room hoping to meet Dr. Adams there. Only a few interns were there, and the waitress began to scold me for coming in so late when the telephone rang and she answered it. If you are the new intern and your name is Dr. Hyman you had better get up to the front office right away, she said, but have a cup of coffee first, because I think you are going to need it.\* I gulped down the coffee, and started upstairs; I was now frankly worried. If the front office was calling me, then I was definitely in trouble because I

had heard that only a very few complaints ever reached the stage where the Superintendent's office was called in. If this was happening to me on my very first day at the hospital, I could see that my future was to be very dim indeed.

It was thus with a heavy heart that I entered the Superintendent's office. He was pacing up and down and he seemed to be arguing with three or four of his assistants. They all looked rather savagely at me as I opened the glass door; I felt weak. The first assistant wasted no time in yelling at me. He said, what the hell have you been doing in Ward K this afternoon? You've got the whole hospital upside down. Couldn't you pronounce a man dead without raising all this rumpus? Then the Superintendent, who is a kindly man, interrupted and said, now young man, will you please tell us exactly what went on in Ward K? So I explained the situation, prefacing my remarks by saying that I was not familiar with the *Lex Mortem Dictu* in use at the hospital, and that I had substituted Section 110 of the 1905 Code; I was in a tight spot and I suppose that I did a cowardly thing in trying to divert attention from my ignorance.

There was complete silence at this, and then the Superintendent said, please tell me the exact statement that you made. Fortunately, I was able to repeat the pronouncement which I did as dignified as I could, the circumstances being what they were. "By virtue of the authority vested in me by the Commonwealth of Massachusetts and in accordance with the rules and regulations of the Health Department of the City of Boston, I, Dr. Hyman, a duly authorized intern of the Boston City Hospital, do hereby and hereon officially pronounce this man dead and in witness thereof I hereby and in the presence of these witnesses set my hand and signature."

Again there appeared to be a stunned silence; finally the Superintendent turned to the first assistant and said, Charlie, the first thing in

son is legally dead. In the course of time such a pronouncement has the weight of unwritten law and I know of no hospital that has a specific ritual of pronouncing a man dead. By word of mouth, one intern hands the traditional method of the institution to another and sooner or later pronouncement of death may become just a nod of the head. What you inadvertently did yesterday was to stir up a problem which has no especial answer, and how much good or bad will come of it, no one can guess. It was lucky that you remembered that Section 110 of the 1905 Code. In the meantime, the front office has a hot potato in its collective hands and I would advise you to keep away from that part of the hospital. We then went into the operating room and nothing further was said about the matter.

" . . . they all looked rather savagely at me . . . "

January 1955





# Inside H. M. S.

## A EUROPEAN MEDICAL EDUCATION

*Ervin L. Lobpreis, '56*

Anyone attempting to deal with the differences between the Alma Maters of the Old and the New World should bear in mind the influential role the European University has been playing in public affairs throughout the past centuries. In turn the university life has been moulded by powerful streams of thought arising from the Renaissance and humanism, the Reformation, enlightenment, French Revolution, and most recently from the western formulations of freedom and democracy, particularly that secured by the American Revolution. Each of these has left a lasting imprint on the academic soil, and out of this composite background the present system has emerged, reflecting a wakeful awareness of its cultivated tradition.

In considering the various aspects of the medical education, the essential features could best be illustrated by accompanying an aspirant of the Aesculapian art on his labyrinthine itinerary in a mid-European University with a 600-year tradition.

At the age of 11, the young adept enters the Gymnasium, a special type of high school handed down from its medieval predecessor and divided into eight classes (*prima-octava*). During this time he is exposed to a variety of subjects under the teaching and guidance of his professors, all of whom have a required four-year university training and many of whom have a Ph.D. degree. The schedule is rather rigid with five hours of didactic teaching for six days a week, daily assigned readings and exercises, memorizing, recitations, frequent oral and written examinations, and the grades 1(A)-5(E). At the end of the eighth year, the student comes of age and gets ready for his Maturity Examination, which consists of both written and oral parts in native language and literature, history, and three electives: one living language; Latin or mathematics; physics, chemistry or natural sciences.

Thus the Gymnasium fulfilled the function of imparting to the young man a general knowledge and disci-

plined thinking both broad and deep enough to prepare him for a conscious citizenship, and to equip him for a further pursuit of more specific study on the university level.

There was no college. As viewed by American eyes it would appear as if the undergraduate study were divided into two portions, one being included in the Gymnasium, and the other incorporated into the corresponding University Faculty. (Traditionally the University was formed by five Faculties, *i.e.*, Schools: Theology, Philosophy, Law, Medicine, and Natural Sciences.) In this way all the "pre-medical" study was connected directly with the Faculty of Medicine.

Passing the Maturity Examination—regardless of the actual grade or relative standing—was in fact the only requirement constituting the eligibility for university entrance. No other items were required and individual appraisals, narrative reports of impression about the applicant, or letters of recommendation were virtually unknown. The Faculties did not select their students—it was the student who chose the Faculty. A deep-rooted conviction prevailed that any commercialization of knowledge or inaccessibility to the establishments of high learning was undesirable and instead a genuine intellectual interest, thirst, and love for knowledge should attract people motivated to learn. Since all the Universities were state institutions, the tuition amounted to about one-half of the monthly salary of an American high school teacher and 80-90 per cent of the students received some scholarship. Every qualified candidate had an inalienable right to be enrolled. Consequently there was no limitation to the number of students accepted, *i.e.*, no *numerus clausus*. In practice the student submitted his Maturity Examination Certificate together with other credentials including his curriculum vitae to the Dean's Office, and upon payment of a nominal fee at the Bursar's Office (*quaestura*) was officially inscribed as a regular listener ("*studiosus ordinarius*" in distinction

to "studiosus extraordinarius" who was permitted to audit some courses which could not, however, be counted toward the degree. This was usually the case of a student who, owing to his inadequate formal preparation, did not give sufficient evidence of scholastic ability to ascertain the scientific truth with due objectivity.) He was also given his "index" (index lectionum), his official record of the courses taken and a true companion throughout his studies.

Upon entering the Faculty of Medicine, our pilgrim, now a MUST. (medicinae universae studiosus), armed with much idealistic zeal and his index, finds himself confronted with the following curriculum comprising ten semesters and extending over the next five years of his trying but happy life:

In order to cover this program, a certain minimal number of hours was prescribed for each semester ranging from 20–35 lecture hours per week. At the beginning and the end of each term the student had to

	Subject	hours weekly	number of semesters	earliest semester for examination
	I. Rigorosum: <sup>1</sup>			
1st year	1. General Biology	5	2	end of II
	General Biology practicum <sup>2</sup>	2	2	
	2. Medical Physics	5	2	
	Medical Physics practicum	2	2	end of IV
	3. Medical Chemistry	5	2	
	Medical Chemistry practicum	4	2	
2nd year	4. Anatomy	6	4	V
	Anatomy practicum	6	2	
	5. Histology	3	1	
	Histology practicum	6	1	
	Embryology	2	1	
	6. Physiology	5	2	
	Physiology practicum	4	2	
	II. Rigorosum:			
	1. Pathology	6	2	end of X
	Pathology practicum	4	2	
	Microbiology	5	2	
	Microbiology practicum	3	2	
	2. Pathologic Physiology	5	2	
	Pathologic Physiology pract.	2	1	
	3. Pharmacology	5	2	after absolutorium <sup>3</sup>
	Pharmacology practicum	2	2	
	4. Internal Medicine & pract.	7½	4	
	5. Pediatrics & pract.	7½	2	
	Vaccination pract.	1	1	
	6. Neurology	5	2	
3rd–5th year	Neurology practicum	1	2	after absolutorium <sup>3</sup>
	Psychiatry	5	2	
	Psychiatry practicum	1	2	
	III. Rigorosum:			
	1. Surgery & pract.	7½	4	
	2. Obstetrics & pract.	10	2	
	Gynecology & pract.		2	
	3. Ophthalmology & pract.	5	2	
	4. Dermatology & pract.	5	2	
	5. Legal Medicine & pract.	5	2	
	6. Hygiene, Prev. Med. & pract.	5	2	only colloquium <sup>4</sup> required
	Other Subjects:			
	Physical Diagnosis & pract.	5	2	
	Oto-rhino-laryngology	5	2	end of V–X
	Oto-rhino-laryngology pract.	1	2	
	Stomatology	5	1	
	Stomatology pract.	1	1	
	Orthopedics & pract.	5	2	
	Urology & pract.	5	2	

<sup>1</sup>rigorosum — a group of rigorously examined subjects

<sup>2</sup>practicum — laboratory work, dissecting clinical procedures or work-ups, etc.

<sup>3</sup>absolutorium — meaning absolution, i.e. waiving of any further formal requirements except examinations

<sup>4</sup>colloquium — oral quiz (see the text)

get into his index the signature of the lecturing professor with "practicavit" for his laboratory and practical work, since only then the semester could be counted toward the ten required for degree.

The general framework was set as follows. The professor (head of the department), appointed to his chair by Academic Senate and approved by the President of the State, conducted most, if not all of the lectures of his course and supervised directly the laboratory or practical work with the help of instructors. As a rule he was a very able pedagogue. The lectures started sometime during the month of October. A typical announcement appearing on the official bulletin board might read: "Professor X. Y. will begin his lectures on pathologic physiology at . . . . . and would like to meet the listeners to set the most convenient hour . . ." All of the lectures started one quarter hour after the stated time and most of them were illustrated with appropriate demonstration. This so-called "academic quarter-hour" was evidently designed to give a benevolent margin to people battling with the picayune vicissitudes of daily life.

Vacation was ample. With all the courses starting individually in October and tapering off toward the middle of June, it took from two to three weeks before the academic year was running in full gear, and with one week of vacation in November, three to four weeks at Christmas, two to three weeks at mid-year in February, three weeks at Easter, and one in May (besides the national holidays) it constituted altogether 24 to 25 weeks. Furthermore, a traditional custom of "clapping off" was perpetuated: since only the first and last lectures of the course were applauded, the students might add a few extra days to the official vacation by a somewhat premature applause, thus signalling that they wouldn't return until after vacation.

All the examinations were conducted on an oral and practical basis throughout the year except summer vacation; no written examination took place at any time. They were open to the academic public. One week in advance, the students notified the Dean's Office by a slip stating in what subject they wished to be examined and from these a list was prepared giving the particulars as to the actual time and place of the examination. The professor himself was the only examiner, taking as much time as he wished to satisfy himself about the candidate's adequacy. As a rule three main questions were asked in the oral part and the examiner could invoke his right to ask for a fourth question in case of an equivocal result. The practical part, lasting up to several hours, consisted of dissection, autopsy, working up a selected patient, or whatever was applicable to the subject. Only three grades were given: excellent—satisfactory—unsatisfactory. In case of failure two more attempts were allowed. This applied to the 18 examinations of the three rigoro. Colloquium, on the other hand, was a special type of test required for some subjects and for the maintenance of



financial scholarship. It was not so exhaustive and limited to oral examination.

No enumeration of differences would be complete, however, without including the most powerful element, namely Academic Freedom. Far from ever being a cliché, this concept was so fundamental that it permeated all the practices of the university life.

The student was asked to realize the meaning, honor, pride and obligation of his newly acquired status as an academic citizen, and soon after his inscription he made his Matriculation Oath by shaking the Dean's hand and vowing that he would live up to the high standards of intellectual honesty and decency, and behave in accordance with the decorum of the Medical Faculty.

By definition Academic Freedom constitutes several things: for the scholar it implies (1) the right to pursue his research through the open investigation of all data; (2) the right to teach and to publish without control or restraint from the institution which employs him (tantamount to the civil right that is enjoyed, in statute, by the citizens of democratic countries); (3) the property right of tenure of office. And as a corollary to all this, it is the definite moral obligation of all those who enjoy it to pursue and defend the line of open and thorough inquiry regardless of personal consideration. History has recorded occasional miscarriages of the pursuit of this freedom, such as burning at the stake or the monstrosities of the concentration camp.

For the student it implies: (1) the access to all sources of information as the best way to the discovery of truth; (2) the right to learn, and to arrive at his knowledge and skill in an individual manner; (3) the right to be examined at a time of his own choosing.

Furthermore, the extra-territoriality of the academic soil ensures this freedom against the imperative political systems or other aggressive influences. Inferentially the state police can enter the university campus only with explicit permission of the Rector (president of the University), and some criminals were known to take refuge on the university premises much as they would on those of a church.

With this background one can readily understand the conspicuous absence in such a setup of any rigidity of a stereotyped schedule, ubiquitous quizzes, fixed examination, any kind of forced performance, controlled attendance, and *pari passu* no palpable external constraint, unnecessary tenseness, or mathematical tumbling in the constant effort to "evaluate" the student and to establish relative standing in his group.

There is no routine pattern. Every student is free to work out his own individual schedule which he can further adjust to his pace, needs, interests and obligations. He can study at two faculties simultaneously, unless there is a collision of the basic requirements, work for two degrees, or interrupt his study at any stage for one or more semesters. There are no classes, just semesters with much overlapping in vintage and scholastic

advancement of the listeners. There is considerable time and opportunity for interpersonal relationships to commence and to develop. There is much interaction also between the Faculties and numerous joint events take place from inspiring lectures to the traditional sport matches. The dormitory (collegium) pulsates with life all day and throughout the year. The students can pursue their extracurricular activities *ad libitum* and take an active part in the manifold manifestations of the life and world around them.

The intended product of all this is a mature individual. He is treated as such and has broad margin to his activities. He soon realizes that freedom cannot be lawless and utilizes the given freedom to formulate these laws in accordance with his own nature. With privileges he is glad to accept responsibilities for his own development, conscious self-education, and non-competitive raising of his personal standards now and for the rest of his life. This he finds relatively easy, since his intellectual curiosity, imagination, and initiative are unhampered by a superimposed constricting structure and he is free to take his time to reason out his attitudes, to mobilize his own thinking and organize his knowledge and experience into a comprehensive synthesis and thus gain a new functional impetus. Besides he can cultivate his innate propensities and participate directly in the life of his community, even as a student. Thus being able to develop in balanced harmony of growth he will satisfy his basic human need: satisfaction and real enjoyment out of his work and life in general.

Let us return to our student. Upon completion of the first *rigorosum* he receives the title of MUC (*medicinae universae candidatus*), a sort of baccalaureate degree, henceforth placed before his name. This gives him access to the hospital and right to examine the patient. From now on he moves into the realm of clinical medicine. If there has been little rigidity so far, he is now entirely free to plan his own schedule and take the required subjects in any sequence.

There were many additional optional courses given by specially qualified lecturers (*docents*) covering selected topics, X-ray, and a variety of themes from medical terminology to practical massage. They were quite popular. And even if not, they went on anyway. Once the *docent* assembled an audience of two he would proceed with his lecture, according to the dictum: "*Tres faciunt collegium*." There was a general tendency to absorb as many lectures as possible and to do the bulk of studying and hospital practice during vacations. Besides the student could easily arrange to enter the hospital ward at any time looking for examples of diseases he was just studying, or before an examination. There he found many a helpful hand. He was invited rather than expected to do things. The general atmosphere was very congenial, all students calling themselves "colleague" and doctors and professors addressing them as colleagues.

The semester in which the first *rigorosum* was com-

pleted was counted as the fifth and five additional accredited clinical semesters were required for an absolutorium. Thus the earliest time for getting an absolutorium was ten semesters, but often it would take longer, since no time limit was set, and one could stretch one's sojourn almost *ad infinitum*. There is a recorded case of a student putting in 26 semesters in all, qualifying him almost for the designation of "eternal student."

And so our student is nearing his journey's end. After the absolutorium he goes through a taxing period by trying to pass the remaining examinations in rapid succession. Again no deadline is set, but he is somewhat tired of the seemingly endless voyage. He also knows that the average time for getting the medical degree is about six years. Eventually the big moment comes when on the day of his last examination the professor (does the strict examiner ever smile?) tells him that he passed. The rest is ambrosial. Since no dissertation is required, he can start making arrangements for his "promotio" (individual commencement). The ceremony of promotion took place many times during the years, usually in small groups of 6-12. It was especially formal (*cum auspiciis*), if somebody managed to pass all his examinations, starting from the first class of gymnasium, with honors. This was about as common as a white caribou. The essence of the ceremony is the Hippocratic Oath and after his vow our master medical man is bestowed with the MUDr. degree (*medicinae universae doctor*), marking the goal of his long endeavor and a happy

milestone in his life. Many warm embraces sealed this commemorative day. . . .

Yet not all were that lucky. The mortality was high and—people and life being what they are—the statistics showed that only about 50 per cent of those inscribed in the first semester ever received their degree. Admittedly there were economic and time losses in this process of natural selection and free academic enterprise, but aren't these just a few of the tributes we decided long ago to pay gladly for our freedom?

No direct effort here has been spent on analytical comparison of the varying systems of medical education, and the critical evaluation is left to the reader. Rather, the intention has been to show the constellation of conditions existing in a mid-European University where the western concepts of liberty and democracy grafted on a long tradition resulted in a new form of academic freedom.

I believe that the practical interpretation of this academic freedom constitutes an excellent curriculum, and should be made an all-pervading ingredient in the scholastic medium during the formative years of the medical students here. They would fare better as students and might come nearer to the expectations as doctors of tomorrow.

Editor's note: The author is at present a member of the Class of 1956 at Harvard Medical School, and studied medicine at the Medical Faculty of the Masaryk University in Czechoslovakia from 1945 to 1948.

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# Harvard's New Nobel Laureates

SUCH STUFF AS DREAMS ARE MADE ON

*Theodore H. Ingalls, '33*



*Dr. John Enders (left) and Dr. Thomas Weller*

The achievement of the 1954 Nobel Prize winners in Medicine is to be evaluated against a background of versatility in the humanities as well as the sciences, for the final feats were accomplished after many years' exploring of paths leading anywhere except to the direct conquest of infantile paralysis. To understand the accomplishment of cultivating poliomyelitis viruses in tissue cultures is to retrace the ordinary, everyday parts of the careers of Enders, Weller and Robbins as they probed hidden recesses of bacteriology and virology, along a way that detoured suddenly to Sweden. In the 1930's they were less like *Herren Professoren* donning morning clothes to receive the peer of medical awards than boys looking for birds' eggs. Nor is the simile too far-fetched, for John Enders has been peering at embryonating hens' eggs for much of his professional life and Tom Weller's first publication—in 1935 when he was a student not

yet graduated from the University of Michigan—was on "A Twelve-year-old Bluejay Recaptured."

When John Enders received the Passano Award in June, 1953, for his researches on poliomyelitis, he acknowledged a temptation to cry out like Keats "transported by the song of the nightingale, 'Do I sleep or wake?'" That being the fact, he must really have had to pinch himself on October 21st last when the phone rang while he was in his office chatting with Tom Weller and Lederle's Harold Cox and someone on the other end of the phone informed him that the greatest honor in medicine was his. "Do I sleep or wake?" indeed!

If it seems somewhat startling for Harvard's number one bacteriologist to cry out like Keats rather than to make some pedestrian allusion to Koch, perhaps the explanation lies in the fact that he knew much more of Keats than of Koch when he embarked on his graduate career after

receiving a perfectly satisfactory diploma from Yale. Nor was the first part of that graduate career even in science, let alone bacteriology. It was in English that the future Nobel laureate set off in 1921-22 to concentrate on Chaucer, Shakespeare, Anglo-Saxon, Beowulf and Comparative Literature. He was awarded his M.A. in 1922.

Although his uncle had been a physician and he had never had difficulties with biological subjects, John Enders had always preferred the humanities until he was inoculated with the virus of a great scientific mind. He went out to some social function, so the story goes, encountered Hans Zinsser's lucid ideas and great vision, and like the man who came to dinner, he stayed—in Harvard's department of bacteriology—until he eventually took over the Research Division of Infectious Diseases at the Children's Hospital. If he fell under the spell of a great teacher and humanist, Enders, too, was to reveal himself as humanist as well as scientist, not only in the cultural connotation of that word but in its simpler meaning of humane and human. It is no accident that a converted student of Othello, The Wyf of Bath and Grendel, a one-time keeper of bees, an amateur carpenter and photographer, a gardener of no mean accomplishment and a demon striped bass fisherman is the kind of bacteriologist who, when favored a bit by "l'hasard," came home with a Nobel prize.

To qualify as a bacteriologist, John Enders had completed his Ph.D. thesis on "A Study in Bacterial Allergy" under Zinsser in 1930. Thereafter, as instructor in the department of bacteriology, he helped Harvard students over their difficulties with streptococci, staphylococci, hay bacilli, stab cultures and crazy quilts of Endo's medium; and all those other cook-book procedures now hazy in most of their memories.

With a quiet courtesy and a kindly, droll expression on his face as he

looked owl-eyed over his spectacles like a junior and lean edition of Winston Churchill, John Enders was never too busy to stop, look, listen and reflect; sometimes he even paid a student the compliment of removing his glasses and replying at length—perhaps with seven words. These were the days when his spare time and personal researches were being devoted to the more conventional aspects of bacteriology—with the antigens of tubercle bacilli and pneumococci as an associate and protégé of Hans Zinsser, at that time Harvard's illustrious name in bacteriology. In the pre-war period, the dizzy heights of rickettsial research included hearing Wolbach describe the pathology and Zinsser the bacteriology of *Rickettsia prowazekii*. As the decade ticked through like a time bomb, John Enders became one of Zinsser's assistant professors; and he has remained prouder of this association with "my former master" than of subsequent honors and acquisitions in rank.

Meanwhile, Fred Robbins was taking the first two years of medicine at the University of Missouri, and at Harvard Medical School Tom Weller was cutting his deciduous teeth with his second venture into print, entitled "A Note on the Sex Ratio of the Yellow Perch in Douglas Lake, Michigan." *Perca flavescens*, it appears, went decidedly female in that lake by a ratio of 100:1 in 1936 and '37. No evidence was uncovered that the males were either unhappy or unhealthy, or that they had migrated to deep waters; nor was there evidence that there might be a reversal of the sexes. "This question is left open," concluded Weller, and "subject to further study." The problem remains one of those unsolved mysteries of ecology to this day (although later a German confirmed this lamentable sex ratio for Teutonic perch). Thereafter Weller took his problems indoors, having received his M.D. in 1940. As a fourth-year student, he had thrown in his aspirations, energy and imagination with Enders, and with A. E. Feller started productive

investigations on roller tube cultures of vaccinia virus. Within their cylindrical interiors the prolonged coexistence of cells and (vaccinia) virus was effected. Yet this success also marked the end of an epoch—for Enders especially. Zinsser fell mortally stricken with leukemia; World War II burst suddenly upon America and voluntary research slowed down to a walk when it did not come to a standstill. Weller had started pediatric training at the Children's Medical Center in January 1941, but Pearl Harbor interrupted further thought of collaboration by the two men and took them into assignments far removed from each other—John Enders as civilian consultant to the Secretary of War on Epidemic Diseases, and Tom Weller as Major in charge of the bacteriology, virus and parasitology section of the Antilles Department Medical Laboratory at San Juan, Puerto Rico.

If the war broke up most collaborations, it also provided a broadened experience for many physicians and laid the foundation for partnerships to come. John Enders was working persistently on mumps, a disease that has wartime significance and one that has much in common, theoretically, with poliomyelitis, especially in its reproductive and immunologic properties. Weller, although concentrating primarily on tropical diseases and parasites, maintained throughout the war an active interest in virus infections, particularly those of the upper respiratory tract. Fred Robbins, having been house officer in bacteriology and then intern at the Children's Medical Center in 1941 and 1942, was assigned to the Mediterranean Theatre to field and laboratory work on infectious disease. The result was the identification of Q Fever among Allied Troops in Italy and in the postwar period the production of a vaccine against the disease. This accomplishment had no foreseeable bearing on poliomyelitis research but it reveals that Robbins had also come of age on his own.

In 1947, Enders and Weller resumed a collaboration begun before

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the war. They set up a new laboratory at the Children's Hospital and were joined in 1948 by Fred Robbins, who began to explore systematically the possibilities of the roller tube tissue culture as applied to poliomyelitis. Concurrently they set about testing hypotheses involving the viruses of mumps, chicken pox-herpes zoster, atypical pneumonia and influenza. Finally, the important lead emerged: the Lansing strain of poliomyelitis could be cultivated on non-nervous tissue, the severed foreskin. The idea of using this easily obtainable viable tissue was truly a stroke of inspiration—even though it eventually transpired that epithelial cells could serve as hosts to all three strains of viruses of poliomyelitis; and that the three strains could be cultured on various embryonic tissues and were not confined to epithelial derivatives.

As virus multiplied, cells were destroyed. It was demonstrated in due time that the cytopathogenic effect of any one of the three main types of virus could be entirely suppressed by mixing the virus with its homologous antiserum before it was introduced

into the culture. The short term objective of the trio was now accomplished. A test had been developed by which active infection or the presence or absence of antibodies might be demonstrated. As someone has put it, "This marked the end of the monkey era in polio research." Of more dramatic interest, the demonstration that the viruses could multiply in tissue cultures showed how large quantities could be harvested for vaccine production. How effective that vaccine may be is not yet determined. The point being made is not that the goal is in sight, but that when reached, the achievement of Enders, Weller and Robbins will remain as the final base camp from which assaults on the highest peaks were mounted.


The other camps traversed on the way up are best known to the three prize winners. Specific studies in virology, luncheon conversations on the epidemiology of mumps and its similarities to poliomyelitis, the work of Gey who introduced the roller tube and of others like Bang who helped perfect roller tube methodol-

ogy, and the demonstration of cytopathogenesis as an objective finding; these are all essential contributions that will never be formally evaluated and awarded prizes. Yet they have been measured in a way, for acknowledgement was made by Enders to unseen helping hands when he quoted from Zinsser—who thus lives again in his distinguished pupil:

"It is an erroneous impression that scientific discovery is often made by inspiration—a sort of *coup de foudre* from on high. This is rarely the case. As a rule the scientist takes off from the manifold observations of his predecessors, and shows his intelligence, if any, by his ability to discriminate between the important and negligible, by selecting here and there the significant stepping stones that will lead across the difficulties to new understanding. The one who places the last stone and steps across to the *terra firma* of accomplished discovery gets all the credit. Only the initiated know and honor those whose patient integrity and devotion to exact observation have made the last step possible."

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# HONORS



Dr. Samuel Levine, '14, (left) and Mr. Charles Merrill

Mr. Charles E. Merrill, New York investment banker, has endowed a chair of Medicine in the Harvard Medical School to honor his friend and physician, Dr. Samuel A. Levine, Clinical Professor of Medicine at Harvard and a member of the staff of the Peter Bent Brigham Hospital. A gift of \$400,000 by Mr. Merrill has already been made to the University to provide the major part of the endowment he plans to insure permanent support of the Samuel A. Levine Professorship of Medicine. The purpose of the gift is to strengthen research teaching in cardiology and cardiovascular disease at Harvard. Mr. Merrill, who is senior partner of the investment firm of Merrill, Lynch, Pierce, Fenner and Beane, is the son of a physician. Dr. George P. Berry, in announcing the establishment of a new professorship, pointed out that through his endowment Mr. Merrill had made secure at Harvard leadership in the vitally important fields of research and teaching in cardiovascular disease.

Dr. Levine graduated from Harvard Medical School with the Class of 1914 and has contributed much to the field of medical writing. His text, *Clinical Heart Disease*, first published in 1936, is now in its fourth edition. The establishment of a professorship

in his name is an appropriate honor for Dr. Levine, who has taught many classes of medical students and post-graduate doctors. Those who have had the opportunity to hear him discuss the value and the fine points of the simple bedside methods of cardiac examination will deem it particularly fitting that a professorship in his name has been established to maintain the high tradition of medical teaching and investigation in cardiovascular disease.

\* \* \* \*

Two members of the Faculty of Medicine were honored on October 15 while attending the convocation on the 100th Anniversary of the founding of the Faculty of Medicine of Queen's University, Kingston, Ontario, Canada.

Edward D. Churchill, '20, John Homans Professor of Surgery in the Harvard Medical School and Chief of the General Surgical Services at the Massachusetts General Hospital, delivered the Centennial Lecture in Surgery, entitled "The Surgeon and the University." He was awarded the degree of Doctor of Laws, *honoris causa*, and cited as follows: "Edward Delos Churchill, surgeon and teacher of surgeons, distinguished representative of a famous school and hospital, whose innovations in surgery of the chest have added to the achievements of all who are fellow practitioners."

George Widmer Thorn, Hersey Professor of the Theory and Practice of Physic in Harvard Medical School and Physician-in-Chief at the Peter Bent Brigham Hospital, also was honored with the degree of Doctor of Laws. On this occasion Dr. Thorn delivered the centennial lecture in medicine to the Alumni, delegates and guests on the subject of "The Adrenal Glands, 1854-1954." The award cited Dr. Thorn as "notable in a great medical school as a

teacher whose students have spread out to influence medical teaching throughout the continent, distinguished as a fruitful investigator in the complex fields of metabolism and endocrinology."

\* \* \* \*

Thomas H. Lanman, '16, Director of Alumni Relations, became the first recipient of the William E. Ladd medal during the annual meeting of the American Academy of Pediatrics in Chicago. This medal, named for Dr. Ladd, former Surgeon-in-Chief at Boston Children's Hospital, is to be awarded from time to time by the American Academy of Pediatrics to an individual who has made major contributions to pediatric surgery. It is appropriate that Dr. Lanman be the first such person to be so honored. As Dr. Ladd's associate and co-worker, he has been responsible for significant advances in pediatric surgery. He was a pioneer in the surgical treatment of bronchiectasis and of exstrophy of the bladder, and made fundamental advances in esophageal surgery. As Senior Surgeon at Children's Hospital and Clinical Professor of Surgery at Harvard Medical School, he has played a dominant role in the training of many pediatric surgeons.



Dr. Thomas H. Lanman, '16



# NECROLOGY

1894

CLARENCE HARVEY HILL died at Brookline, Massachusetts, August 18, 1954.

1895

TIMOTHY LEARY died at Jamaica Plain, Massachusetts, November 16, 1954.

1896

HARRIS PEYTON MOSHER died at Salem, Massachusetts, November 4, 1954.

1899

WILLIAM CLIFFORD MACDONALD died at Norwich, New York, October 3, 1954.

LUTHER GORDON PAUL died at Newton Center, Massachusetts, October 6, 1954.

1901

ALBERT EVANS died at Boston, Massachusetts, September 27, 1954.

PERCY GATES KNICKERBOCKER died at Venice, California, July 17, 1954.

1902

CORNELIUS JOSEPH LYNCH died at Quincy, Massachusetts, September 21, 1954.

1904

THOMAS JOSEPH BRENNAN died at Tucson, Arizona, September 20, 1954.

1914

HERBERT RUTHERFORD BROWN died at Rochester, New York, August 17, 1954.

1916

ELMER TURELL LEARNED died at Fall River, Massachusetts, September 10, 1954.

1917

ROBERT WILLIS BELKNAP died at Damariscotta, Maine, August 11, 1954.

HOVHANNES ZOVICKIAN died at Watertown, Massachusetts, October 10, 1954.

1919

JOSEPH BOCH died at Brightwaters, New York, July 17, 1954.

JESSE BRINKER GRIFFITH died at Pittsburgh, Pennsylvania, July 12, 1954.

1926

ISAAC RODMAN died at Philadelphia, Pennsylvania, November 1, 1954.

DAVID STERN died at Boston, Massachusetts, September 15, 1954.

1901

Albert Evans died at Boston, Massachusetts, September 27, 1954. Dr. Evans, a member of the board of trustees of Medfield State Hospital and Boston State Hospital, was also assistant in clinical medicine at Tufts College Medical School. He was a life fellow of the American Psychiatric Association, a member of the Massachusetts Medical Society, the Suffolk District Medical Society, the Harvard Club of Boston, and served as secretary-treasurer of the Order of 1606. He is survived by his wife, a sister, and a grandson.

Percy Gates Knickerbocker died at Venice, California, July 17, 1954.

1902

On Saturday, November 20, more than 400 townspeople and friends honored Dr. Herbert B. Lang on the occasion of his 50th anniversary as physician in South Hadley, Massachusetts. Dr. Lang, a native of New York City, is a graduate of Phillips Exeter Academy and Brown University. He interned at Lawrence General Hospital and practiced briefly in Dorchester before moving to South Hadley. Following a small dinner party, Dr. and Mrs. Lang received their friends in the vestry of the First Congregational Church, where the townspeople presented Dr. Lang a bond and Mrs. Lang a leather purse. Among those present for the celebration were the Langs' two sons and their families, the doctor's brother and his wife, and the first set of twins delivered by Dr. Lang.

Cornelius Joseph Lynch died at Quincy, Massachusetts, September 21, 1954. Former health commissioner in Quincy, Dr. Lynch headed the Tuberculosis Clinic in that city at the time of his death. He was a consultant at Carney Hospital, Dorchester. Dr. Lynch was a member of the Massachusetts Medical Association, Norfolk County Medical Society, University Club of Boston, and was past president of the Holy Cross Alumni Association of Quincy.

1904

Thomas Joseph Brennan died at Tucson, Arizona, September 20, 1954. Dr. Brennan was prevented from attending his 50th Reunion at Harvard Medical School last May by a serious illness.

1910

At a ceremony in London on October 18, James L. Gamble received the Maxon Medal of the Royal College of Physicians of London, which is presented every third year "to the person who is deemed to have most distinguished himself by observation and research in clinical medicine." Among the ten previous winners, only one was an American—the late George R. Minot ('12), Professor of Medicine at Harvard and Director of the Thorndike Memorial Laboratory, Boston City Hospital. Dr. Gamble, who is Professor of Pediatrics, *Emeritus*, at Harvard, has carried on his major research at Boston Children's Hospital.

# ALUMNI NOTES

1894

Clarence Harvey Hill died at Brookline, Massachusetts, August 18, 1954.

1895

Timothy Leary died at Jamaica Plain, Massachusetts, November 16, 1954. He had served as Medical Examiner for Suffolk County, Massachusetts.

1896

Harris Peyton Mosher (A.B. Harvard, '92) died at Salem, Massachusetts, November 4, 1954. Dr. Mosher, Walter Augustus Lecompte Professor of Otolaryngology, *Emeritus* and Professor of Laryngology, *Emeritus* in Harvard, served as chief of service of the Department of Otolaryngology, Massachusetts Eye and Ear Infirmary, and the Massachusetts General Hospital. He was president of four national medical societies, chairman of the American Board of Otolaryngology, and a member of four foreign societies. In addition to inventing surgical instruments, he developed several surgical techniques. He received the Semon Medal of the University of London, and gold medals

of the American Laryngological Association and the American Academy of Ophthalmology and Otolaryngology. He served overseas with the Harvard Medical Unit in 1915 and afterwards was with the Surgeon General's office in Washington. Mrs. Mosher survives.

1898

On his 83rd birthday, Joseph H. Pratt was honored at a dinner given by his friends and associates at the Harvard Club of Boston as a tribute to his 52 years of medical service. Dr. Pratt, for whom the Pratt Diagnostic Clinic was named, pioneered in hospital social service, medical education for rural areas, area medical centers and group psychotherapy.

1899

William Clifford MacDonald died at Norwich, New York, October 3, 1954.

Luther Gordon Paul died at Newton Center, Massachusetts, October 6, 1954. A retired surgeon, he had taught in the Tufts and Harvard Medical Schools and was on the staff of Carney Hospital. Dr. Paul was a fellow of the American College of Sur-





